

Public Health Reports

Treasury Department, United States Marine-Hospital Service. Published in accordance with act of Congress approved February 15, 1893.

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UNITED STATES.

RÉSUMÉ OF THE OPERATIONS OF THE U. S. MARINE-HOSPITAL SERVICE.

[Reprint from the Annual Report of the Secretary of the Treasury for the fiscal year ended June 30, 1899.]

MARINE-HOSPITAL SERVICE.

The Surgeon-General of the Marine-Hospital Service reports that the past year, being the one hundred and first of the existence of the Service, has been the most active in its history. The number of patients treated in the marine hospitals and dispensaries exceeded that of any previous year, and the duties of the Service in relation to quarantine and public health were largely increased, both in volume and variety, by reason of the war with Spain and the resulting territorial acquisitions.

The Service owns and operates 22 marine hospitals, and there are besides 107 stations where patients receive hospital or dispensary treatment. During the fiscal year 1899 the total number of patients was 55,489 of which number 12,610 were treated in hospital.

Professional aid was given to other branches of the Government service as follows:

To the Revenue Cutter Service, in the examination of 990 applicants for the position of cadet, engineer, and seaman; to the Steamboat-Inspection Service, in the examination of 1,860 pilots for color-blindness, 64 being rejected; to the Life-Saving Service, in the examination of 1,275 applicants for the position of surfman, and the examination of 363 claims of surfmen for the benefits provided by section 7 of the act

of May 4, 1882; to the United States Coast Survey, examinations, 36; to the Light-House Service, examinations, 14; to the Naval Reserve, examinations, 8. The total number of physical examinations was, therefore, 4,179, of which number 250 were rejected.

Aid was also extended to the Immigration Service by the medical inspection of 297,785 immigrants; to the Civil Service Commission in making physical examinations; and to the Army and Navy by the reception of patients in marine hospitals, and by the detail of medical officers for sanitary supervision of United States Army transports. These officers were gradually withdrawn after Marine-Hospital officers had been assigned to quarantine duty in ports of Cuba and Porto Rico.

During the year the hospitals have received special attention in the matter of repairs and preservation and ward equipment. The medical libraries have been increased by the addition of the latest standard works; the operating rooms have received new and improved instruments and appliances, including X-ray machines, and the laboratories have been provided with photographic outfits. A new service ambulance has been adopted and supplied to a large number of the stations.

New purveying depot.

As mentioned in the last annual report of the Service, the business of the purveying division had reached such proportions that the establishment of a purveying depot in New York became necessary.

After careful consideration, a suitable building was secured under lease in New York and the purveying depot transferred thereto during the past summer. The space in the Bureau thus vacated has permitted the enlargement of the Bureau organization, required by the additional duties imposed upon it.

Marine hospital for consumptives, Fort Stanton, N. Mex.

Upon application of the Surgeon-General, the Secretary of the Interior was requested to transfer to this Department, for the treatment of consumptive patients of the Marine-Hospital Service, the abandoned military reservation known as Fort Stanton, N. Mex., and on April 1, 1899, an Executive order was signed to that effect. A medical officer was placed in command, and preparations were made for the reception of patients, who are now being transferred.

This measure will not only be of benefit to the patients treated in this favorable climate, but will relieve the marine hospitals of these contagious cases, and will be of material aid to the great movement now being urged throughout this and other countries in suppressing this communicable disease. Legislation will be requested for the development of this sanitarium.

New marine hospital for New York.

The Surgeon-General again refers to the necessity of Congress making an appropriation for a marine hospital for the port of New York. The present arrangement for the care of sick and disabled seamen at the principal port of the United States in a building leased from time to time is unsatisfactory. I concur in his recommendation.

Medical corps.

The medical corps at the end of the fiscal year consisted of 83 commissioned medical officers. During the year, after successful examination, as required by law, 16 applicants were commissioned as assistant surgeons. Since June 30, 10 have been appointed. There are, in addition, 95 acting assistant surgeons, 11 sanitary inspectors, and 38 hospital stewards—a total of 144 noncommissioned officers. In addition to the commissioned and noncommissioned officers, there are about 400 attendants and quarantine employees when the marine hospitals and quarantine stations have their full complement of men. This number is of necessity largely increased during epidemics.

Three assistant surgeons contracted yellow fever, and 1 died of this disease October 12, 1899, while engaged in the work of preventing its spread in Key West. The Fifty-fifth Congress passed a law authorizing the payment of the amount of salary and allowances for two years to the legal representatives of an assistant surgeon who died of yellow fever under like circumstances in 1893. The Surgeon-General recommends the passage of a general law granting a like amount in the event of the death of any officer in the active performance of his duties. He points to the fact that these officers are subject to change of station, as are officers of the military and naval establishments, and ordered to posts of exceptional danger; also, that like provision is made for the Life-Saving Service. The Secretary concurs in his recommendation, with the limitation that the officer's death should be occasioned by an infectious or contagious disease, acquired by him in the discharge of his official duty.

Expenditures.

The expenditures from the Marine-Hospital fund during the fiscal year 1899 amounted to \$680,897.71. The balance on hand at the close of the fiscal year was \$683,187.93. The amount available from the appropriation for the prevention of the introduction and spread of epidemic diseases at the beginning of the fiscal year was \$457,190.93, and the balance remaining to the credit of this appropriation at the close of the fiscal year was \$292,650.26. The sum of \$100,000 was added to this fund by act of March 3, 1899.

Reorganization of Marine-Hospital Bureau.

The Surgeon-General represents that a reorganization of the divisions of his office was made imperatively necessary during the past summer by reason of increased work connected with the care of sick and disabled seamen, and by the opening of new marine-hospital stations; also by the operation of the act of Congress approved February 15, 1893, entitled "An Act granting additional powers to and imposing additional duties upon the Marine-Hospital Service," and the extension of the national quarantine service to the islands of Cuba and Porto Rico.

The Bureau as now organized consists of six divisions, each under a commissioned medical officer: First, Division of Marine Hospitals and Relief; second, Division of Domestic Quarantine; third, Division of Foreign Quarantine; fourth, Division of Sanitary Reports and Statistics; fifth, Division of Personnel and Accounts; and, sixth, Miscellaneous Division.

Hygienic laboratory.

In the early part of the last fiscal year the investigations, covering a period of thirteen months, of the pollution of the Potomac River water were completed. The results were confirmatory of the report submitted to the last Congress, Senate document 211, and they indicate clearly the necessity for filtration of the District of Columbia water supply before it is furnished to consumers.

The work in connection with car sanitation has been carried so far that further investigation is unnecessary, and a complete report thereon is in preparation.

Experiments to test the efficiency of formaldehyd as a disinfectant have claimed attention throughout the year, and a report has been published upon "Disinfection with formaldehyd in a vacuum chamber combined with dry heat."

Bacteriological and pathological work in the investigation of the cause of the epidemic of meningitis which prevailed in many localities, including the city of Washington, has been carried on during the year, and is still in progress.

The work of the laboratory has included also the examination of specimens transmitted from the stations, and an investigation into the nature of pneumonia, Malta fever, and typhoid fever. The immunization of a horse against typhoid fever has been progressing satisfactorily, and a series of experiments are now in progress to test the value, in the prevention or cure of the disease, of the serum obtained from this animal.

Following the report of the commission on yellow fever, the immunization of a horse was at once begun with a view of obtaining a serum that will prove efficacious in the prevention and cure of yellow fever. This work is still in progress.

The Surgeon-General renews the recommendation made in the previous year that the laboratory be removed from its present location in the Bureau, and that a special building be provided for it. This laboratory has complete equipment, and in view of its important and practical character the facilities for its conduct should be increased by the erection of a suitable building.

National quarantine service—Domestic.

The Marine-Hospital Service now owns and operates 13 large and complete quarantine stations, which, the Surgeon-General reports, with their boarding vessels, disinfecting apparatus, hospitals and personnel, add materially to the administrative duties of his office. There were 3,838 vessels inspected and 370 disinfected at these stations during the fiscal year. There are, besides, 9 stations where inspection of incoming vessels is conducted by officers of the Service.

New quarantine station near Astoria, Oreg.—In accordance with the act of Congress approved July 1, 1898, a site for a quarantine station has been selected in the State of Washington, near Astoria, Oreg., not far from the mouth of the Columbia River. The purchase of this site, with the buildings thereon, has been arranged, but its consummation has been necessarily deferred pending the examination of title. On account of urgency, temporary provision has been made, and quarantine examination of incoming vessels is now being conducted.

Savannah quarantine.—In April a proposal was received from the mayor and city council of the city of Savannah to turn over the function and plant of the Savannah quarantine to the Marine-Hospital Service. This tender was made at the time when large bodies of troops were being returned to the United States from Cuba, using Savannah as a port of entry. The quarantine work connected therewith devolved almost entirely upon the Marine-Hospital Service, and such fact, together with the expressed confidence of the city of Savannah in the Marine-Hospital Service, led to this tender.

The quarantine was accepted under section 8 of the act approved February 15, 1893, and the buildings leased at a nominal figure for two years, the proposal being that at the expiration of this period the Government should purchase the property of the Savannah quarantine at a price to be fixed by arbitration, or, if the city of Savannah desired to resume its quarantine functions, any improvement made by the Government should be paid for by the city at a price to be fixed by arbitration. The Department, being unauthorized to formally accept these terms, agreed to recommend to Congress the legislation necessary to carry out the intent thereof. Accordingly, the necessary appropriation is recommended in the Book of Estimates. The transfer was effected on April 18, and the station is now being conducted as a national quarantine station.

The Savannah quarantine station, from a sanitary standpoint, is of the greatest importance, Savannah being the principal city of the South Atlantic seacoast, and the vessels entering there are of an especially dangerous character, inasmuch as they come from tropical ports. During the last year there were 445 vessels subjected to quarantine inspection at that port, of which number 58 were infected. The acquisition of this quarantine was in accordance with the spirit as well as the letter of the law of 1893, which contemplates the surrender by State and local quarantines of their quarantine functions to the National Government. This is rightly regarded as an important step in the attainment of a strictly national quarantine.

Mullet Key detention camp.

On account of new fortifications on Egmont Key, the War Department demanded the removal of the detention camp which had been established by the Marine-Hospital Service on this island during the war with Spain, and transferred to the custody of this Department the adjoining Mullet Key. The camp, therefore, has been transferred to Mullet Key. This is essentially a quarantine camp, necessary for the detention of people who may have been exposed to yellow fever before permitting entry at the important port of Port Tampa.

There is a State quarantine on Mullet Key, occupied by consent of the War Department before the transfer of the island to this Department. It is without facilities for the detention of suspects, however, as provided by the detention camp established there by the Marine-Hospital Service.

Craney Island.

The Department has also received from the Navy Department the right of possession of Craney Island, a small island in the vicinity of Norfolk, Va., which, under the direction and control of the Marine-Hospital Service, is utilized for the reception of smallpox patients from Portsmouth, Norfolk, and neighboring localities, each city meeting its own expenses.

Post epidemic disinfection and aëration.

During the winter of 1898-99 disinfection of houses and contents was performed in the several localities in Louisiana and Mississippi infected during the yellow-fever outbreak in 1898.

In the city of New Orleans the Marine-Hospital Service, by request of the State and city boards of health, and with their cooperation, undertook an inspection and thorough aëration of houses where the fever had prevailed. The number of infected houses was so great that nothing more than aëration on bright, cold days was attempted. The Surgeon-General believes there is little doubt of the value of this work, as

shown by the lateness and limited number of cases that developed during the past fall.

Sanitary operations connected with the return of troops from Cuba and Porto Rico.

Early in the spring, before the onset of the rainy season, the President determined to return to the United States troops in Cuba and Porto Rico no longer required there for military purposes. Yellow fever having prevailed among some of these troops, and because of the uncertainty with regard to others, the disinfection of all their baggage was deemed necessary. Arrangements were perfected with the Quartermaster's Department, which rendered valuable cooperation and assistance, and the camp equipage and baggage of all the troops, about 25,000 in number, was effectively disinfected by the Marine-Hospital Service at six quarantine stations during March and April. Moreover, soldiers returning after April 1 were required by the regulations to be held in detention camps for a period of five days to demonstrate their freedom from infection. About 12,000 were thus detained under the direct surveillance of the national quarantine officers. The work was highly successful. There has been no infection traceable to the baggage or personnel of the troops connected with this movement.

Yellow fever—National Soldiers' Home, Virginia.

In the latter part of July last an epidemic of yellow fever appeared in the National Soldiers' Home, near Hampton, Va., the management of which was given over entirely to the Marine-Hospital Service, whose efforts to suppress the same were successful, there having been a total of 45 cases and 13 deaths. The success has but one parallel, that at McHenry, Miss., in 1898.

In his annual report the Surgeon-General discusses the probable origin of the fever, and describes the methods adopted to suppress it.

The epidemic excited unusual attention because of the peril to which some thirty-five hundred veterans of the civil war were exposed, and because of the terrible ravages of this disease in Norfolk and vicinity in previous years. As usual in all epidemics, endeavor was made by irresponsible parties to throw doubt upon the character of the disease, but the opinion of the physicians, twelve or more in number, who saw the cases, among them experts of national reputation and one sent by the State of Louisiana, leaves no question as to the diagnosis.

The Surgeon-General gives credit to the physicians of the Home and its governor for their prompt and intelligent action, and calls attention to the lesson to be derived from this epidemic, namely, the necessity of promptly recognizing and announcing the disease. The incident is encouraging as demonstrating that when this is done the spread of the disease may be checked.

Yellow fever in Louisiana and Mississippi.

Despite the work of the Service and the Louisiana State board of health during the winter of 1898-99 in aerating houses and the contents thereof, infected during the outbreak of yellow fever in New Orleans in the fall of 1898, the disease again appeared as a recrudescence, the first case having been noted in the city of New Orleans in May, 1899, but there has been no very wide spread, and up to the present time the total number of cases reported has been less than one hundred.

In September, yellow fever was reported in Jackson, Miss., and Mississippi City; but in these places, as in New Orleans, the tendency to spread has been limited, and the cases have been few.

In both Louisiana and Mississippi officers of the Marine-Hospital Service have been present to insure the execution of the Treasury quarantine regulations and give aid to the local health authorities. Officers have also been detailed to investigate rumors and pass upon the nature of suspected cases in many localities.

Yellow fever in Key West and Miami, Fla.

On August 27 the Marine-Hospital Bureau received the first announcement of the existence of yellow fever in Key West, though subsequent developments indicate that it had previously prevailed there in mild form for several weeks. The management of the epidemic in the city itself was left, as is contemplated by the law, to the State quarantine authorities, the efforts of the Marine-Hospital Service being directed toward preventing the disease from spreading to other portions of the State and to other States. Accordingly, the Service established a maritime patrol around the island of Key West and a detention camp on Dry Tortugas, 60 miles distant, where persons desiring to leave might undergo the required period of detention. To October 20 there had been reported 1,230 cases of yellow fever and 60 deaths. Many cases of a mild type have doubtless been unreported, as a number of the Cuban physicians in the city have failed to report their cases. The epidemic is rapidly on the decrease.

The disease was subsequently discovered at Miami, Fla., the first official announcement being made October 19, with the statement that it had probably been existing in a mild form unrecognized for two months. There have been reported to October 23, 20 cases and 2 deaths. It has not been determined whether the yellow fever at Miami is traceable to the fever at Key West, and if it is, whether the cases were not existing there before the quarantine patrol had been placed around the island of Key West.

Miami has been placed under quarantine, and the Marine-Hospital Service has prepared a small detention camp at Fulford, a few miles north, for people wishing to leave Miami. The lateness of the season renders a widespread prevalence improbable.

The Surgeon-General reports that prior to the announcement of the fever there had been a number of cases of so-called dengue fever, many of which were without doubt mild cases of yellow fever. He deprecates the unwillingness of physicians to acknowledge the serious nature of supposed cases of dengue fever, and in his report urges that measures be taken to prevent the spread of dengue, since that disease is so often associated with yellow fever.

Quarantine on the Texas-Mexican border.

On account of the prevalence of yellow fever and smallpox in Mexico quarantine officers were stationed at the three principal railroad crossings from Mexico into Texas—at El Paso, Eagle Pass, and Laredo. Passengers from Mexico were obliged to give evidence of not having been in any yellow fever infected district in Mexico for ten days prior to their arrival at the border, this inspection service being supplemented by a system of sanitary certificates issued in Mexico.

Aid in the suppression of smallpox.

In accordance with the announcement made in the annual report for 1898, the assistance of the Marine-Hospital Service in the suppression of smallpox has been limited chiefly to expert services in diagnosing the disease in many localities and instructions to the local authorities in the methods to be pursued. The methods of suppressing smallpox in communities are so plain, and the protection of individuals so evidently the duty of the communities themselves, that the Marine-Hospital Service will not assume any financial obligations connected therewith. The Bureau has, however, issued a large number of a précis upon the methods of diagnosing and suppressing this disease, which have proved of great value to local authorities. Expert officers have been detailed in several of the States, at the request of the governors or health authorities thereof, for duty as above indicated. A general vaccination of crews of vessels on the Great Lakes, the rivers, and Atlantic and Gulf coasts was conducted by the officers of the Marine-Hospital Service during the past winter to assist in the movement to suppress this disease.

The Surgeon-General calls particular attention to the necessity of vaccination as a reliable preventive. The Bureau has officially declared that no vaccine virus except that known as glycerinized vaccine lymph should be used, and that the purity of this form of virus is unquestioned. The prejudice against vaccination which has heretofore to some extent prevailed is no longer justified in view of this perfected preparation, by use of which untoward results from vaccination need not be feared. This form of virus is easily procured, and upon its free use, in conjunction with the recognized quarantine procedures, must reliance be placed for the suppression of this loathsome disease now so generally prevalent.

National quarantine service—Insular and foreign.

Cuba, Porto Rico, and the Philippines.—In January of the present year an order was signed by the President and the Secretary of War transferring all the maritime quarantine of Cuba and Porto Rico to the Marine-Hospital Service. In March another Executive order was issued declaring that the expenses of this service should be paid from the revenues of the islands, and setting aside \$300,000 annually from tonnage-tax receipts of Cuba as a quarantine fund. A thorough organization was effected as soon as possible, there being at the present time some thirty officers of the Service in Cuba and seven in Porto Rico. The selection and assignment of officers, the promulgation of regulations, the purchase of disinfecting apparatus, boarding vessels, etc., has been a work of great magnitude and importance.

Two complete sets of most recent and approved type of disinfecting apparatus for quarantine stations have been sent to Manila, with the approval of the Secretary of War, and arrangements are now under consideration for their use in protection against the plague and other diseases prevailing in the Orient.

Central American fruit ports.—In April the Marine-Hospital Service organized an inspection service for the fruit ports of Central America. Seven medical officers were assigned to the United States consulates in as many ports, their duties being so to assure the safety of fruit vessels before leaving the foreign port as to prevent their detention and the consequent ruin of cargoes on arrival at ports of the United States.

Mexico.—On account of the violent epidemic of yellow fever in Vera Cruz, Mexico, an officer of the Service was detailed in the office of the United States consul at that port, and subsequently, on account of the same disease in various interior towns in Mexico and the danger of its being conveyed across the Texas border, a commissioned officer, with the expressed assent of the State Department, was sent to the City of Mexico to organize a system of inspection and disinfection of infected baggage, in order to facilitate the travel of people across the Texas border. Some twenty localities in Mexico were infected with yellow fever. Sanitary inspectors were appointed to act in conjunction with the consular service in furnishing certificates to be presented at the border to the quarantine officers stationed there.

Acknowledgment is due the Mexican Government for its courteous attitude toward this measure of the United States.

Medical officers in other foreign ports.—On account of the increasing prevalence of plague in Asia and certain portions of Europe and Africa, officers of the Marine-Hospital Service have been detailed for duty at Honolulu, Yokohama, Hongkong and Naples. Inspections have also been made by Marine-Hospital surgeons of Oporto and Lisbon, Portugal; Barcelona, Spain; Marseilles, France; Cairo and Alexandria, Egypt; and the principal seaports of western Europe whence emigrants

sail for the United States, including Bremen, Antwerp, Hamburg, and Rotterdam. As provided by the law of February 15, 1893, Marine-Hospital officers have been detailed to serve in the consular offices at these principal ports. The Bureau has also a medical representative upon the sanitary commission in Constantinople, and a medical officer at Rio de Janeiro.

Leprosy investigation.

Measures have been taken to put in effect the act passed by the last Congress authorizing a commission of medical officers to ascertain the number of cases of leprosy now in the United States.

Cause of yellow fever.

With regard to yellow fever, attention is invited to the report of the commission of medical officers of the Marine-Hospital Service detailed by direction of the President to make an investigation into the cause of this disease. Their findings are important, inasmuch as they verify those of Sanarelli in his discovery of the bacillus icteroides. They further demonstrate that this disease is received into the human system through the respiratory tract, and indicate the probability of a protective and curative serum similar in its use to that now employed in the treatment of diphtheria. While this discovery gives ground for hope of amelioration in the matter of yellow fever in the future, the Surgeon-General calls attention to other measures deemed highly essential.

The success attending the efforts of the Government authorities in Cuba in diminishing the prevalence of this disease by sanitation is an object lesson to be studied by our own and all other governments of the Western Hemisphere. It is known that there are many seaports of this hemisphere where yellow fever is endemic because of bad sanitary conditions, readily removable by proper sanitary engineering. An inquiry is now being conducted concerning the ports of the Western Hemisphere where yellow fever constantly prevails, with a view of definitely determining the reason therefor, and proving, if possible, that it is due to want of proper drainage, sewerage, and cleanliness of the harbor. The report suggests that in the interests of commerce, as well as of life and health, the time may come when an international agreement may be effected between the republics of this hemisphere by which the unsanitary conditions which perpetuate this western pest in certain ports will be considered a just cause of complaint by the other republics, and such quarantine or other restrictions imposed by mutual agreement upon the government possessing the offending port as will cause it to adopt the necessary measures for the removal of the evil. The Surgeon-General points out that action of this character would be far-reaching in its effects upon the welfare and commercial prosperity of all.

National quarantine law.

The bills introduced into the Senate and House of Representatives of the last Congress to strengthen the national quarantine law, though strongly indorsed by both the Senate and House committees, were not acted upon. The Surgeon-General points to the fact that these amendments can have no justifiable opposition, at least those relating to maritime quarantine; and in view of the threatening bubonic plague he urges that legislation be enacted strengthening the national quarantine service in the manner indicated in the above mentioned bills, which have already received the approval of this Department.

Instructions to consuls concerning medical officers detailed for duty at the consulates.

DEPARTMENT OF STATE,
Washington, December 12, 1899.

SIR: I have the honor to acknowledge the receipt of your letter of the 1st instant containing the names of medical officers who have been detailed for duty at various consulates in Europe and asking that the consuls be notified.

In reply, I have to inform you that suitable instructions in the matter have been sent to the consuls. I inclose a copy of one of these instructions, which are all alike.

Respectfully,
HON. SECRETARY OF THE TREASURY.

JOHN HAY.

[Inclosure.]

DEPARTMENT OF STATE,
Washington, December 11, 1899.

SIR: I have to inform you that, with the approval of the President, P. A. Surg. H. W. Wickes, of the Marine-Hospital Service has been detailed to your office for duty in connection with the enforcement of the quarantine laws and regulations. Dr. Wickes is to be considered as forming part of your staff and will have charge of quarantine matters and the responsibility for bills of health will rest upon him. You will, however, sign these documents jointly with him.

I inclose a copy of a letter from the Treasury Department from which you will see that medical officers have been detailed to all the important points in Europe from which emigration to the United States takes place. This action is taken on account of the danger arising from a possible introduction of the plague into the United States.

The Department will expect you to cooperate heartily with the medical officer and render him all possible assistance in the performance of his important duties.

Respectfully,

THOS. W. CRIDLER,
Third Assistant Secretary.

MR. SAMUEL M. TAYLOR,
Consul of the United States, Glasgow, Scotland.

Detail of medical officer for duty at Santos, Brazil.

By reason of the outbreak of bubonic plague at Santos, Brazil, it was deemed necessary to detail an officer for duty at that port for the purpose of keeping the Bureau informed as to the progress of the disease and to prevent its introduction into the United States through shipping.

Dr. William H. Carson was appointed acting assistant surgeon and, by authority of the President, detailed for duty in the office of the United States consul at Santos. He sailed from New York on the steamer *Wardsworth* Wednesday, December 20, 1899, and will assume his duties immediately upon arrival at that port. He has been instructed to endeavor to arrange for transportation of coffee direct from plantations to the vessels without storage in warehouses, which are apt to be infested by rats. He will promptly notify the Bureau of the departure of all vessels for the United States, giving the ports for which the vessels are bound.

[Reports to the Surgeon-General United States Marine-Hospital Service.]

Yellow fever in the United States as reported to the Surgeon-General United States Marine-Hospital Service from August 31 to December 22, 1899.

Places.	Date.	Cases.	Deaths.
Florida:			
Key West.....	Aug. 31-Sept. 30....	859	46
	Oct. 1-Oct. 31.....	432	20
	Nov. 1-Nov. 20.....	25	2
	Nov. 26.....	3	
	Nov. 30.....	1	
Miami.....	Sept. 5-Sept. 22....	2	1
	Oct. 19-Oct. 31.....	45	2
	Nov. 1-Nov. 22.....	86	7
Port Tampa City.....	Sept. 4-Nov. 16....	10	1
Louisiana:			
New Orleans.....	Aug. 27-Sept. 30....	31	7
	Oct. 2-Oct. 31.....	73	9
	Nov. 3-Nov. 10.....	9	4
	Nov. 26-Dec. 9....	2	
Maryland:			
Baltimore.....	Oct. 8.....	a 1	1
Mississippi:			
Centerville.....	Sept. 29.....	2	
Flora.....	Oct. 25.....	(b)	
Jackson.....	Sept. 10-Oct. 30....	55	8
	Oct. 31-Nov. 1....	6	1
Mississippi City.....	Sept. 1.....	1	1
	Sept. 14-Sept. 29..	26	1

a At quarantine station. b Yellow fever reported.

Smallpox in Allen County, Ind.

FORT WAYNE, IND., December 13, 1899.

SIR: In Sorpio Township, Allen County, near the State line, 8 families are afflicted with smallpox, imported from Delaware, Ohio. They are all quarantined, with smallpox physician and nurse, for treatment. Number of cases so far, 27.

Respectfully,

Dr. CARL PROEGLER,
Secretary Allen County Board of Health.

Influenza and smallpox in Norfolk and vicinity.

NORFOLK, VA., December 13, 1899.

SIR: I have the honor to report several cases of influenza at this station. Since my last report it has been impossible for me to obtain any reliable information concerning smallpox at this port. It is reported that it exists in this city, Portsmouth, Berkley, and Norfolk County, and in a more fatal type than last year. In order to report accurately on the situation I addressed letters to the health authorities

of the above-mentioned cities and county on December 6, 1899, requesting them to give me definite information on the subject. So far I have received only two replies: Berkley reports 1 case convalescent, Portsmouth declines to give me the information. Norfolk city and Norfolk County have not replied to my interrogatory.

I have seen no cases personally, although I have heard unofficially of several cases in this city recently.

Respectfully,

EDWARD E. FEILD,
Acting Assistant Surgeon, U. S. M. H. S.

REPORTS FROM THE MEXICAN BORDER.

El Paso, Tex., December 9, 1899.—I have the honor to report that during the week ended December 9 I examined 120 passengers for successful vaccination on the Mexican Central Railroad. Inspection at the international bridge, 73; vaccination of immigrants, children, and others, 27; disinfection of baggage and household goods, 11; refused entrance on account of being cripples, 3.

Respectfully,

E. ALEXANDER,
Sanitary Inspector, U. S. M. H. S.

Laredo, Tex., December 12, 1899.—I have the honor to submit the following report for the week ended December 9, 1899: Immigrants inspected and allowed entry, 15; immigrants requiring vaccination and vaccinated, 5. I inspect all passengers from Mexico, but, since raising the quarantine against yellow-fever points, only keep record of immigrants inspected.

Respectfully,

H. J. HAMILTON,
Acting Assistant Surgeon, U. S. M. H. S.

Smallpox in Mexico near the Texas border.

EAGLE PASS, TEX., *December 10, 1899.*

SIR: From personal information, I find the following conditions existing adjacent to this point in Mexico:

Cities.	Cases.	Deaths.	Time.
C. P. Diaz.....	1	1	Last 30 days.
San Felipe.....	22	18	Do.
Sabinas.....	17	3	Do.
Progreso.....	20	(a)	Do.
San Juan de Sabinas.....	7	(a)	Do.
Monclova.....	6	1	Do.

a Not known.

The poor people are continually moving from place to place, like birds of the air; they carry the disease with them. As it grows colder, the spread increases.

Respectfully,

C. C. DRAKE,
Collector.

Smallpox in the United States as reported to the Surgeon-General United States Marine-Hospital Service, June 30 to December 22, 1899.

[For reports received from January 1 to June 30, 1899, see PUBLIC HEALTH REPORTS for June 30.]

Places.	Date.	Cases.	Deaths.	Remarks.
Arkansas:				
Independence County.....	Oct. 26.....	1		
Jackson County.....	Oct. 27.....	19		
Jefferson County.....	Oct. 4.....	20		
Lee County.....	Sept. 1-Nov. 25...	11	0	
Pope County.....	.....do.....	1		
Pulaski County.....	Oct. 4-Oct. 26.....	16		
Total for the State.....		68		
California:				
Oakland.....	June 3-June 24...	2	0	
San Diego.....	June 1-June 30...	0	0	
Total for the State.....		2	0	
Colorado:				
Arapahoe County.....	Nov. 13.....	1		
El Paso County.....	Dec. 4.....	1		
Hinsdale County.....	Sept. 9.....	1		
Lake County.....	Sept. 18.....	2		
.....	Oct. 28.....	2		
Las Animas County.....	Sept. 9.....	1		
.....	Oct. 28-Nov. 18...	3		
Saguache County.....	Nov. 26.....	1		
Total for the State.....		12		
Connecticut:				
Stamford.....	July 20.....	1		
District of Columbia:				
Washington.....	Oct. 25-Dec. 9...	12		
Florida:				
Jacksonville.....	July 1-Sept. 2...	7		
Gadsden County.....	July 1-July 31...	18		
Hillsboro County.....	April 10-July 10...	35		
Jackson County.....	July 1-July 31...	1		
Lake County.....	.....do.....	1		
Leon County.....	.....do.....	4		
Marion County.....	.....do.....	3		
Pasco County.....	.....do.....	5		
Total for the State.....		74		
Georgia:				
Brooks County.....	Aug. 5-Aug. 30...	2	1	
Coffee County.....	Oct. 25.....	1		
Montgomery County.....	July 15-Aug. 10...	31		
Savannah.....	June 3-July 27...	7		
Total for the State.....		41	1	
Idaho:				
Latah County.....	July 1-Oct. 26...	30		
Illinois:				
Calro.....	Nov. 21-Nov. 25...	4		
Chicago.....	June 20-July 1...	3	0	
.....	Oct. 29-Dec. 12...	8	1	
Dixon.....	Oct. 1-Dec. 3...	125		
Total for the State.....		140	1	
Indiana:				
Allen County.....	Dec. 13.....	27		
Clark County.....	July 1-Sept. 30...	6		
Elkhart County.....	.....do.....	1		
Evansville.....	Dec. 12.....	1		
Harrison County.....	.....do.....	1		
La Grange County.....	.....do.....	10		
Lake County.....	.....do.....	1		
Marion County.....	.....do.....	6		
Porter County.....	.....do.....	30		
Total for the State.....		83		
Kansas:				
Butler County.....	Oct. 2.....	5		
Crawford.....	Nov. 22.....	3	1	

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Kansas—Continued.				
Cowley County.....	Nov. 16-Dec. 2...	21	2	
Columbus.....	Nov. 26-Dec. 2...	1	0	
Kansas City.....	June 10-June 17...	2	.....
Lawrence.....	Oct. 1-Oct. 8...	9	1	
Peoria.....	Nov. 26-Dec. 2...	6	0	
Pittsburg.....	.....do.....	1	0	
St. Marys.....	.....do.....	5	0	
Wellington.....	.....do.....	2	1	
Wellington.....	.....do.....	2	0	
Total for the State.....		49	4	
Kentucky:				
Davis County.....	Nov. 30.....	10	.....	Supposed.
Leslie County.....	Aug. 17.....	164	.....
Louisville.....	June 23-Sept. 23...	17	0	
Owensboro.....	Nov. 10-Nov. 16...	1	.....
Owensboro.....	Nov. 30.....	2	.....	Do.
Total for the State.....		134	.....
Louisiana:				
Caddo.....	Dec. 3-Dec. 9...	1	.....
Concordia Parish.....	Oct. 11.....	1	.....
East Carroll.....	Dec. 3-Dec. 9...	22	.....
Iberia.....	.....do.....	1	.....
New Orleans.....	June 17-Aug. 26...	14	0	
Shreveport.....	Oct. 15-Nov. 25...	9	0	
Shreveport.....	Nov. 19-Dec. 9...	14	.....
Shreveport.....	Oct. 15-Dec. 16...	6	0	
Total for the State.....		68	.....
Maryland:				
Baltimore.....	Dec. 13.....	1	0	In quarantine.
Lonaconing.....	.....do.....	1	.....
Total for the State.....		2	.....
Massachusetts:				
Boston.....	June 27-Sept. 2...	9	3	
Boston.....	Dec. 16.....	2	.....
Chelsea.....	Sept. 28-Dec. 9...	29	4	
Everett.....	Aug. 7-Oct. 14...	5	2	
Fall River.....	June 27-Sept. 9...	2	.....
Lowell.....	Oct. 1-Oct. 7...	1	.....
Lowell.....	Dec. 17.....	1	.....
Melrose.....	Oct. 8-Oct. 14...	1	.....
Roxbury.....	Aug. 30.....	3	.....
Total for the State.....		53	9	
Michigan:				
Benton Harbor.....	Oct. 23.....	10	.....
Grand Rapids.....	Oct. 22-Oct. 28...	1	.....
Saginaw County.....	Sept. 10-Oct. 7...	.....	.....	Smallpox reported.
Total for the State.....		11	.....
Minnesota:				
Albert Lea County.....	Sept. 29.....	30	.....
.....	Sept. 30-Oct. 14...	22	.....
Austin.....	July 15-Aug. 1...	1	0	
Duluth.....	.....do.....	1	0	
East Grand Forks.....	.....do.....	7	0	
Round Lake.....	Aug. 1-Aug. 31...	10	.....
Total for the State.....		71	.....
Mississippi:				
Natchez.....	July 7-Nov. 18...	22	0	
Pine Ridge.....	Aug. 16.....	8	.....
Total for the State.....		30	.....
Missouri:				
Barry County.....	April 6-July 20...	35	.....
Lawrence County.....	.....do.....	1	.....
Lincoln County.....	.....do.....	9	.....
Scott County.....	.....do.....	25	.....
St. Francois County.....	April 6-July 20...	30	2	

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
<i>Missouri—Continued.</i>				
Stoddard County.....	April 6-July 20...	35		
St. Louis.....	June 19-June 26...	4		
Total for the State.....		139	2	
<i>Montana:</i>				
Butte.....	Sept. 30-Oct. 18...	2	1	
Great Falls.....	Sept. 18.....	6		
Total for the State.....		8		
<i>New York:</i>				
New York City.....	Oct. 15-Dec. 16...	12	1	
<i>North Carolina:</i>				
Bertie County.....	May 1-May 31...	4		
Burke County.....	July 1-July 31...	1		
Caldwell County.....	do.....	3		
Caswell County.....	do.....	6		
Catawba County.....	do.....	1		
Charlotte.....	June 30.....	1		
Chowan County.....	May 1-May 31...	1		
Currituck County.....	May 1-May 31...	6		
Forsyth County.....	July 1-July 31...	2		
Gates County.....	do.....	2		
Halifax County.....	May 1-May 31...	12		Smallpox reported.
Hertford County.....	July 1-July 31...	7		
McDowell County.....	May 1-May 31...	4		
Moore County.....	July 1-July 31...	2		
Nash County.....	May 1-May 31...	1		
Northampton.....	do.....	1		Do.
Richmond County.....	do.....	1		
Rockingham.....	July 1-July 31...	14		
Rowan.....	May 1-May 31...	1		
Wake.....	do.....	1		
Wayne.....	July 1-July 31...	4		
do.....	May 1-May 31...	7		
Total for the State.....		105		
<i>Ohio:</i>				
Adams Tp., Clinton Co.....	Oct. 1-Dec. 4...	1		
Addyston.....	do.....	1		
Akron.....	do.....	1		
Bloom Tp., Fairfield Co.....	do.....	7		
Bristol Tp., Trumbull Co.....	do.....	1		
Canton.....	do.....	1		
Cedarville.....	do.....	4		
Children's Home, Montgom-				
ery Co.....	do.....	25		
Cincinnati.....	do.....	11		
Cleveland.....	do.....	43		
Concord Tp., Delaware Co.....	do.....	12		
Columbus.....	do.....	1		
Danbury Tp., Ottawa Co.....	do.....	1		
Dayton.....	do.....	3		
Delaware.....	do.....	34	1	
Delaware Tp., Delaware Co.....	do.....	15		
East Liverpool.....	do.....	1		
Findlay.....	do.....	1		
Glenville.....	do.....	1		
Greenfield Tp., Fairfield Co.....	do.....	5	1	
Green Tp., Hamilton Co.....	do.....	1		
Hamilton.....	do.....	6	1	
Jamestown.....	do.....	2		
Lancaster.....	do.....	18		
Loveland.....	do.....	1		
Margarette Tp., Erie Co.....	do.....	4		
Newburgh.....	do.....	1		
New Carlisle.....	do.....	1		
New London Tp., Huron Co.....	do.....	6		
Niles.....	do.....	14		
Prairie Tp., Franklin Co.....	do.....	1		
Radnor Tp., Delaware Co.....	do.....	3		
Rochester.....	do.....	1		
Springfield.....	do.....	12		
Sunbury.....	do.....	2		
Toledo.....	do.....	1		

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Ohio—Continued.				
Washington Tp., Hocking Co.	Oct. 1-Dec. 4...	1		
Xenia Tp., Greene Co.	do	2		
Youngstown	do	1		
Total for the State (a)		254	3	
Oregon:				
Astoria	Oct. 11	1		
Portland	June 13-July 19...	6	0	
Umatilla County	Sept. 7			Smallpox reported.
Total for the State		7		
Pennsylvania:				
Allegheny County	June 3-Nov. 4...	39		
Belle Vernon	June 3-June 26...	1		
Brownsville Township	do	34		
Cambria County	June 3-Nov. 4...	28		
Fulton County	Sept. 27-Nov. 4...	10		
Indiana County	do	1		
Jefferson County	do	3		
Philadelphia	Oct. 22-Nov. 4...	10		
Somerset County	June 3-Aug. 5...	10		
Washington County	June 3-June 26...	11		
Westmoreland County	June 3-Nov. 4...	27		At Penn Station, several.
Total for the State		174		
Porto Rico:				
Ponce	June 17-July 22...	6		
South Carolina:				
Greenville	Dec. 3-Dec. 9...	4		
Tennessee:				
Memphis	Sept. 23-Nov. 4...	6		
Nashville	Nov. 19-Dec. 16...	5		
Total for the State		11		
Texas:				
Beaumont	Aug. 2	8		Many cases reported.
Brazos County	Aug. 4-Aug. 18...			
Brenham, Wash'gton County	do	1		
Candelaria	Sept. 29	1		
Canalgre	do	1		
Dallas	Aug. 4-Aug. 18...	1		
El Indio	Sept. 29	7		
Galveston	Oct. 20	1		
Presidio	July 28	40		
Palno	Sept. 29	2		
Pilares	do	15		
Ruidoso	do	4		
Sabine Pass	July 15	2		
San Antonio	Aug. 1-Aug. 31...	1	1	
	Nov. 1-Nov. 30...	1	1	
Shafter	July 28-Aug. 5...	25		
Taylor	Aug. 4-Aug. 18...	1		
Sixteen places	Aug. 5-Sept. 9...	79	4	
Total for the State		189	5	
Virginia:				
Alexandria	Oct. 20	1		
Bristol	Oct. 1-Oct. 13...	30		
Cape Charles	July 8	1		
Danville	June 14-July 6...	30	0	
Norfolk	June 22-Aug. 4...	19	1	
	Oct. 19-Nov. 8...	5		
	Dec. 18	1		
Portsmouth	June 22-Dec. 16...	74	13	
Appomattox County	Sept. 1-Sept. 30...			Several cases.
Augusta County	July 1-July 31...	1		
Brunswick County	do	2		
Buckingham County	Sept. 1-Sept. 30...	2		
Charles City County	Aug. 1-Aug. 31...	8		
Dinwiddie County	Sept. 1-Sept. 30...	6		
Gloucester County	July 1-July 31...			Smallpox reported.

(a) This makes a total since the first outbreak of the disease—April 6, 1898, to December 4, 1899—of 2,347 cases and 34 deaths. Since January 1, 1899, 1,678 cases and 29 deaths have been reported.

Smallpox in the United States, etc.—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
<i>Virginia—Continued.</i>				
Goochland County.....	July 1-July 31...			Smallpox reported.
Greensville County.....	.....do.....			Do.
Hanover County.....	Sept. 1-Sept. 30...	1		
Isle of Wight County.....	Aug. 1-Aug. 31...	1		
Mathews County.....	.....do.....	6		Do.
Mecklenburg County.....	.....do.....	3		
Norfolk County.....	.....do.....			Do.
Orange County.....	.....do.....	2		
Pittsylvania County.....	.....do.....			Smallpox prevalent.
Princess Anne County.....	July 1-July 31...	2		
Prince George County.....	Aug. 1-Aug. 31...	1		
Scott County.....	July 1-July 31...			Several cases.
Surry County.....	Aug. 1-Aug. 31...	9		
Sussex County.....	.....do.....	14		
	Sept. 1-Sept. 30...	3		
	Aug. 1-Aug. 31...	2		
	Sept. 1-Sept. 30...	7		
Wise County.....				
Total for the State.....		231	14	
<i>Washington:</i>				
Almira.....	July 3.....	9		
Orcas Island.....	Oct. 20-Nov. 14...	11	1	
Seattle.....	July 19-Nov. 4...	11		
Spokane.....	July 8-Aug. 19...	7		
Tacoma.....	July 23-Aug. 5...	2		
Walla Walla.....	June 29.....	8		
Total for the State.....		48	1	
<i>West Virginia:</i>				
Benwood.....	July 5.....	1	0	
Elkhorn, McDowell County...	Aug. 19.....	1		
Total for the State.....		2		

PORTO RICO.

Reports from Ponce.

PONCE, PORTO RICO, November 27, 1899.

SIR: I have the honor to transmit herewith the weekly quarantine and abstract of bills of health reports for the week ended November 25:

The general health of Ponce continues fair. As I have reported, there is a considerable increase in diseases of the gastro-intestinal type. This is mainly confined to the poorer classes and may be attributed to the bad hygienic conditions following the storm of August 8. The infectious diseases show no increase, with the exception that a few mild cases of smallpox are occurring in one of the outlying barrios of the city (San Patricio), in which vaccination has not been well done. This barrio is five or six miles from the city and more from the port, and there is almost no communication between them. The health authorities of Ponce will assume charge of this outbreak at once.

Surgeon Glennan informed me several days ago that, on his recommendation to headquarters at San Juan, orders had been issued for the construction of a disinfecting room for this port to replace the one destroyed in the storm. I have seen and talked with the architect, and if the room is built according to the plans it will be a great relief to this station. Work is to be begun at once. The room is to be placed on the Government dock. I hope to be able to report its completion within the next three or four weeks.

The Spanish steamer *Isla de Panay* came in this week from Cuban and South American ports. She transacted all business in quarantine, and the baggage of all local passengers was disinfected.

Respectfully,

C. H. LAVINDER.
Assistant Surgeon, U. S. M. H. S.

PONCE, PORTO RICO, December 4, 1899.

SIR: I have the honor to transmit herewith the usual weekly quarantine and abstract of bills of health reports for the week ended December 2. Also, mortality report for the two weeks ended on the same date, and a consolidated report of the transactions of the Service at this port for the month of November.

The reported cases of smallpox (Barrio San Patricio) referred to in my last weekly letter are now diagnosed, so the president of the board of health informs me, as chicken pox, and no smallpox whatever is present there. The first report, I learned later, was based upon very meager information and should not have obtained such ready credence. I have not visited this barrio, as it is very far removed from the city and a few cases of smallpox there would not influence the city's health, the communication with the city being almost none, at any time, but especially so now on account of the fearful roads between the two places.

The health reports of the city still show a large number of gastrointestinal cases, and the mortality is high, but it is hardly a cause for wonder when one sees the hygienic conditions under which a great part of the population live. Quarantinable diseases, however, have not appeared anywhere.

We are having very little rain now, but the weather has been quite oppressive during the day, with cool nights.

There is nothing of interest to report among the shipping.

Ground has been broken for my new disinfecting room.

Respectfully,

C. H. LAVINDER,
Assistant Surgeon, U. S. M. H. S.

[Inclosure No. 1.]

Number of deaths in Ponce jurisdiction during the two weeks ended December 2, 1899.

Infectious diseases—

Tuberculosis.....	7
Malarial fever.....	6
Dysentery.....	10
Septicæmia.....	1
Tetanus.....	4
	<hr/> 28
Diseases of the digestive apparatus.....	38
Diseases of the respiratory system.....	3
Diseases of the circulatory system.....	1
Diseases of the nervous system.....	1
Other diseases (anæmia, inanition, etc.).....	20
	<hr/> 91
Total.....	91
Births in the same period.....	36

[Inclosure No. 2.]

Summary of transactions of Service at Ponce during November, 1899.

Total number of deaths reported during November—	
1899.....	287
1898.....	169
Total number of births reported during November—	
1899.....	97
1898.....	68
Total number of vessels inspected during November, 1899.....	21
Total number of bills of health issued during November, 1899.....	21
Number of vessels in quarantine during November, 1899.....	4
Number of passengers whose baggage was disinfected during November, 1899.....	10
Number of vessels inspected during November, 1898.....	23
Number of vessels which sailed during November, 1898.....	19
Number of immigrants inspected during November, 1899.....	36
Rejections.....	0

PONCE, PORTO RICO, *December 11, 1899.*

SIR: I have the honor to transmit herewith the weekly quarantine and abstract of bills of health reports for the week ended December 9.

The general health of Ponce continues as before, and nothing of interest has occurred among the shipping during the week.

Respectfully,

C. H. LAVINDER,

*Assistant Surgeon, U. S. M. H. S.**Immigrants inspected at Ponce during October, 1899.*PONCE, PORTO RICO, *October 31, 1899.*

SIR: I have the honor to give below the number of immigrants inspected by this office during the month of October, with rejections:

October 4, steamship St. Domingue, Fort de France and St. Thomas.....	20
October 11, steamship Philadelphia, Porto Cabello, Curaçao, La Guayra.....	4
October 16, steamship Maria Herrera, Cuba and St. Domingo.....	5
October 22, steamship Syria, Hamburg (Germany).....	2
Total.....	31

There were no rejections during the month.

Respectfully,

C. H. LAVINDER,

*Assistant Surgeon, U. S. M. H. S.**Immigrants inspected at Ponce during November, 1899.*PONCE, PORTO RICO, *December 1, 1899.*

SIR: I have the honor to give below the number of immigrants inspected by this office during the month of November, with rejections:

November 4, steamship St. Domingue, Fort de France and St. Thomas.....	1
November 10, steamship Philadelphia, La Guayra and Curaçao.....	4
November 19, steamship Isla de Panay, Havana and South America.....	5
November 20, steamship Maria Herrera, Cuba and St. Domingo.....	27
November 27, steamship Miguel Gallart, Barcelona (Spain).....	2
Total.....	39

There were no rejections during the month.

Respectfully,

C. H. LAVINDER,

Assistant Surgeon, U. S. M. H. S.

Monthly report from San Juan and subports.

SAN JUAN, PORTO RICO, December 7, 1899.

SIR: I have the honor to submit the following consolidated report of the transactions of the Service at this port for the month of November, 1899:

Number of births	68
Number of births, November, 1898 (comparative)	52
Number of deaths	90
Number of deaths, November, 1898 (comparative)	84

A list of the causes of deaths is inclosed herewith:

Number of vessels inspected	43
Number of vessels inspected, November, 1898 (comparative)	33

Number of vessels in quarantine, 2. The first was the Spanish steamer *Montserrat* which arrived from Havana on November 3. She transacted business in quarantine, and the nonimmune local passengers were held in detention to complete the period of observation.

The other vessel was the Spanish steamer *Buenos Aires* which arrived from Spain on November 11 with 1 case of smallpox on board and 76 passengers for this port. A thorough examination of all passengers revealed the fact that all except 4 had recent successful vaccinations, and after disinfection of their effects, they were released. The non-immunes were vaccinated and kept under observation at the detention station.

The patient died while arrangements were being made to transfer him from the vessel to the lazaretto. He was ordered buried at sea.

The weather still continues warm, the average temperature for the month being 79°. Rainfalls are very frequent, the total for the month being 11.81 inches.

During the month, 105 vaccination certificates were issued and viséed and 180 pieces of baggage were disinfected.

The reports from the small ports are as follows: Vessels inspected, Mayaguez, 13; Arecibo, 6; Humacao, 6; Aguadilla, 4, and Arroyo, 4.

On November 9, the English schooner *Nellie* arrived at Humacao from Trinidad and was held in quarantine by the sanitary inspector on account of the reported plague at Trinidad. He immediately telegraphed me of his action and requested instructions from this office. As the crew were all healthy, the vessel had a clean bill of health, and as the report of plague at Trinidad was not verified, he was directed to release the vessel.

The French steamer *Fournel* from Colon arrived at Mayaguez on November 23 and was held in quarantine to complete the period of observation on account of the presence of yellow fever at Colon.

On request of the French consul, she was given permission to leave quarantine and proceed to sea, without touching at any port of Porto Rico. This was not done, however, as the agents at St. Thomas instructed her to stay out the quarantine at Mayaguez and then take on some cargo at that port. The instructions in regard to this quarantine were issued from this office.

The Norwegian steamer *Gyller* arrived at Mayaguez from Santiago, Cuba, on November 27. She was detained in quarantine by the sanitary inspector, who wired this office for instruction. He was directed to allow her to transact her business in quarantine by means of lighters, which was done.

The number of deaths at the subports during the month are as follows: Mayaguez, 145; Arecibo, 152; Humacao, 50; Aguadilla, 58, and Arroyo, 21.

Respectfully,

A. H. GLENNAN,
Surgeon, U. S. M. H. S., In Command.

[Inclosure.]

Vital statistics of San Juan, Porto Rico, for November, 1899.

Cerebral congestion	2
Asphyxia	2
Stillborn	2
Anæmia	5
Eclampsia	2
Cardiac lesions	10
Bronchitis	4
Cirrhosis of the liver	4
Intestinal colic	1
Diphtheria	2
Enteritis	9
Cerebral sclerosis	1
Aortic stenosis	1
Entero-colitis	6
Typhoid fever	2
Malnutrition	1
Hemorrhage (of the brain)	1
Myelitis	2
Nephritis	1
Peritonitis	3
Malaria	5
Rachitis	7
Septicæmia	1
Pulmonary tuberculosis	11
Tetanus infantum	2
Cancer of uterus	1
Diffuse abscess of the scalp	1
Cardiac atheromatous degeneration	1
Total	90
November, 1899—	
Births	68
Deaths	90
November, 1898 (comparative)—	
Births	52
Deaths	84

Steamship Buenos Aires treated at Miraflores quarantine station.

SAN JUAN, PORTO RICO, December 8, 1899.

SIR: I have the honor to report the arrival of the Spanish steamship *Buenos Aires* from Vera Cruz and Havana on the 4th instant. This vessel transacted her business in quarantine and departed the same day for Spain.

The nonimmune passengers and a few pieces of baggage labeled "to be disinfected" were removed to the San Juan Quarantine Detention Station at Miraflores Island. The passengers received shower baths, and were held to complete the period of observation.

The baggage was disinfected by steam and formaldehyd; the steam chamber being a single-wall affair purchased a few years ago and comparatively new requires considerable care in its use, otherwise the clothing will come out wet and in a damaged condition.

This detention station at Miraflores Island is now fairly equipped, and answers present requirements. Fresh water is pumped by steam from the disinfecting building by the same boiler used for the steam chamber to a small tank upon the detention building, and piped thence to the bathrooms, shower baths, and water-closets.

The first batch of guests departed well pleased with the appointments and treatment. Additional cots, camp stools, etc., are required to meet an extra emergency. Beds are now provided for 50 persons, in sections of 10 each.

Respectfully,

A. H. GLENNAN,
Surgeon, U. S. M. H. S., In Command.

Arrival of alien steerage passengers at Havana during the week ended December 9, 1899.

HAVANA, CUBA, December 9, 1899.

SIR: I herewith submit report of alien steerage passengers at this port during the week ended December 9, 1899:

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 3	Steamship Miguel Jover.....	Valencia, Cadiz, Vigo, Marin, and Corunna.	284
Dec. 4	Steamship La Navarre.....	Santander and Corunna.....	600
Do....	Steamship Reina Maria Christina.....	do.....	732
Dec. 5	Steamship Feodoro de Larrinaga.....	Liverpool.....	6
Dec. 6	Steamship City of Washington.....	Vera Cruz and Progreso.....	22
Dec. 8	Steamship Ernesto.....	Santander, Corunna, and Vigo.....	101
	Total.....		1,745

Respectfully,

G. M. GUITÉRAS,
Surgeon, U. S. M. H. S.

Arrival of alien steerage passengers at Nuevitas during the week ended December 2, 1899.

NUEVITAS, CUBA, December 2, 1899.

SIR: I herewith submit report of alien steerage passengers at this port during the week ended December 2, 1899.

Date.	Vessel.	Where from.	No. of immigrants.
Nov. 30	German steamship Curdyba	Canada.....	1

OWEN W. STONE,
Acting Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Nuevitas, Cuba, during the month of November, 1899.

Total number of immigrants inspected, 7; number passed, 7; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

T. F. RICHARDSON,
Assistant Surgeon, U. S. M. H. S.

Report of immigrants inspected at the port of Santiago de Cuba during the month of November, 1899.

Total number of immigrants inspected, 90; number passed, 90; number certified for deportation on account of dangerous contagious or loathsome diseases, or for other physical causes, none.

Disposition of immigrants certified for deportation.—Number deported, none; number admitted, 90.

HERMAN B. PARKER,
Acting Assistant Surgeon, U. S. M. H. S.

Report of immigration at Boston for the week ended December 9, 1899.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
Port of Boston, December 10, 1899.

Number of alien immigrants who arrived at this port during the week ended December 9, 1899; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 3	Steamship Prince George.....	Yarmouth, Nova Scotia.....	60
Do....	Steamship Boston.....	do.....	52
Dec. 4	Schooner Almo Nelso.....	Liverpool, Nova Scotia.....	3
Dec. 6	Steamship Anglian.....	London, England.....	5
Do....	Steamship English King.....	Antwerp, Belgium.....	1
Do....	Steamship Etolia.....	Avonmouth, England.....	4
Do....	Schooner Carrie Easler.....	Liverpool, Nova Scotia.....	1
Dec. 7	Steamship Prince George.....	Yarmouth, Nova Scotia.....	51
Do....	Steamship Boston.....	do.....	34
Dec. 8	Steamship Halifax.....	Halifax, Nova Scotia.....	39
Do....	Steamship Norwegian.....	Glasgow, Scotland.....	2
Dec. 9	Steamship British Trader.....	London, England.....	2
Dec. 10	Schooner Agatha.....	Jordan Bay, Nova Scotia.....	1
Do....	Steamship Boston.....	Yarmouth, Nova Scotia.....	23
Do....	Steamship Prince George.....	do.....	39
Total.....			308

GEORGE B. BILLINGS,
Commissioner.

*Report of immigration at New York for the week ended December 2, 1899.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of New York, December 4, 1899.**Number of alien immigrants who arrived at this port during the week ended December 2, 1899 ;
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Nov. 26	Steamship La Normandie.....	Havre.....	497
Nov. 27	Steamship Belgravia.....	Hamburg.....	631
Do....	Steamship Hekla.....	Copenhagen, etc.....	91
Nov. 28	Steamship Bulgaria.....	Hamburg.....	356
Do....	Steamship Archimede.....	Naples.....	789
Do....	Steamship Spaarndam.....	Rotterdam.....	299
Nov. 29	Steamship Noordland.....	Antwerp.....	656
Do....	Steamship Aller.....	Genoa and Naples.....	551
Dec. 1	Steamship Bolivia.....	Naples.....	671
Do....	Steamship Darmstadt.....	Bremen.....	802
Do....	Steamship Germanic.....	Liverpool and Queenstown.....	246
Do....	Steamship Patria.....	Naples.....	525
Total.....			6,114

EDW. F. McSWEENEY,
*Acting Commissioner.**Report of immigration at New York for the week ended December 9, 1899.*OFFICE OF U. S. COMMISSIONER OF IMMIGRATION,
*Port of New York, December 11, 1899.**Number of alien immigrants who arrived at this port during the week ended December 9, 1899 ;
also names of vessels and ports from which they came.*

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 3	Steamship Umbria.....	Liverpool and Queenstown.....	171
Do....	Steamship La Champagne.....	Havre.....	440
Do....	Steamship Pretona.....	Hamburg.....	680
Dec. 4	Steamship Rotterdam.....	Rotterdam.....	714
Dec. 5	Steamship Friesland.....	Antwerp.....	443
Do....	Steamship Auguste Victoria.....	Genoa and Naples.....	661
Dec. 6	Steamship Oceanic.....	Liverpool and Queenstown.....	253
Dec. 7	Steamship Trave.....	Bremen.....	457
Dec. 8	Steamship Willehad.....	do.....	849
Dec. 9	Steamship Lucania.....	Liverpool and Queenstown.....	251
Do....	Steamship Albano.....	Hamburg.....	312
Do....	Steamship Tainui.....	Glasgow.....	107
Do....	Steamship Palatia.....	Hamburg.....	409
Total.....			5,747

THOMAS FITCHIE,
Commissioner.

Report of immigration at Philadelphia for the week ended December 16, 1899.

OFFICE OF U. S. COMMISSIONER OF IMMIGRATION.

Port of Philadelphia, December 16, 1899.

Number of alien immigrants who arrived at this port during the week ended December 16, 1899; also names of vessels and ports from which they came.

Date.	Vessel.	Where from.	No. of immigrants.
Dec. 13	Belgenland.....	Liverpool and Queenstown.....	161

JNO. J. S. ROGERS,
Commissioner.

REPORTS FROM NATIONAL QUARANTINE

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure
UNITED STATES:					
1	Alexandria, Va.....	Dec. 16	.....	.....	.....
2	Beaufort, N. C.....	do.....	.....	.....	.....
3	Brunswick, Ga.....	Dec. 9	.....	.....	.....
4	Cape Charles, Va.....	Dec. 16	.....	.....	.....
5	Cape Fear, N. C.....	Dec. 9	.....	.....	.....
		Dec. 16	.....	.....	.....
6	Columbia River, Oreg.....	Dec. 9	Br. ss. Glenholm.....	Dec. 9	Panama.....
7	Delaware Breakwater Quarantine, Lewes, Del.	do.....	.....	.....	.....
		Dec. 16	.....	.....	.....
8	Eureka, Cal.....	Dec. 9	.....	.....	.....
9	Grays Harbor, Wash.....	do.....	.....	.....	.....
10	Gulf Quarantine, Ship Island, Miss.....	do.....	.....	.....	.....
11	Newbern, N. C.....	Dec. 16	.....	.....	.....
12	Pascagoula, Miss.....	do.....	.....	.....	.....
13	Port Townsend, Wash.....	Dec. 9	Br. bk. Ravencourt.....	Dec. 6	Panama.....
14	Reedy Island Quarantine, Del.....	Dec. 16	.....	.....	.....
15	San Diego, Cal.....	Dec. 9	U. S. ss. Marblehead.....	Dec. 9	Acapulco.....
16	San Francisco, Cal.....	do.....	.....	.....	.....
17	San Pedro, Cal.....	do.....	.....	.....	.....
18	Savannah, Ga.....	do.....	Nor. bk. Norden (a).....	Nov. 27	Para.....
		do.....	Br. bktn. Albatross.....	Dec. 8	Havana.....
19	South Atlantic Quarantine, Blackbeard Island, Ga.	do.....	.....	.....	.....
20	Tortugas Quarantine, Key West, Fla.....	Dec. 16	.....	.....	.....
		Dec. 8	.....	.....	.....
21	Washington, N. C.....	Dec. 16	.....	.....	.....
CUBA:					
22	Calbarien.....	Dec. 9	.....	.....	.....
23	Cardenas.....	do.....	.....	.....	.....
24	Cienfuegos.....	do.....	.....	.....	.....
25	Daiquiri.....	Dec. 2	.....	.....	.....
26	Gibara.....	Nov. 11	.....	.....	.....
27	Guantanamo.....	Dec. 2	.....	.....	.....
28	Havana.....	do.....	.....	.....	.....
		Dec. 9	.....	.....	.....
29	Isabela de Sagua.....	do.....	.....	.....	.....
30	Manzanillo.....	Dec. 2	.....	.....	.....
31	Matanzas.....	Dec. 9	.....	.....	.....
32	Nuevitas.....	do.....	Nor. ss. Jamaica.....	Dec. 5	Mexico.....
33	Santiago de Cuba.....	Dec. 2	.....	.....	.....
PORTO RICO:					
34	Ponce.....	Nov. 11	Sp. ss. Miguel Gallart.....	Nov. 27	Barcelona.....
		Dec. 2	.....	.....	.....
		Dec. 9	.....	.....	.....
35	San Juan.....	do.....	Sp. ss. Buenos Aires.....	Dec. 4	Havana.....
Subports—					
36	Aguadilla.....	Dec. 2	.....	.....	.....
37	Arecibo.....	do.....	.....	.....	.....
38	Arroyo.....	do.....	.....	.....	.....
39	Hurmacao.....	do.....	.....	.....	.....
40	Jobos.....	do.....	.....	.....	.....
41	Mayaguez.....	do.....	Nor. ss. Gyller.....	Nov. 26	Santiago.....

aPreviously reported.

AND INSPECTION STATIONS.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1					1
2					5
3					5
4					1
5					5
6	Portland	Held for disinfection.....	Dec. 9	1 case malaria on Am. bgtn. Haskell from Punta Gorda. 13 of crew sick at Panama with yellow fever; 6 deaths; 1 case after leaving port.	5
7					3
8					4
9					2
10					1
11					3
12				No transactions.....	7
13	Tacoma	Discharging ballast.....		5 cases yellow fever in Panama, 3 deaths; 3 cases, 1 death, en route.	12
14					23
15	San Diego	Passed on medical officers certificate.	Dec. 9		2
16				1 case beriberi on Br. ss. Gengoyle from Manila.	13
17	Savannah	Held for disinfection.....			1
18	do	do.....			12
19					3
20				No transactions.....	
21				do.....	
22					
23				No report.....	4
24				1 case of malarial fever on ss. Sedgwick from New York; slight.	6
25				No report.....	
26				do.....	
27				do.....	
28					18
29					17
30				No report.....	2
31					7
32	Havana	Discharged; to be cleaned at sea.	Dec. 6		7
33				No report.....	
34	Havana	Held in quarantine till departure.	Nov. 28	Baggage 3 local passengers disinfected.	6
35	Las Palmas	Held in quarantine	Dec. 4	Nonimmune passengers detained to complete period. Baggage disinfected.	2 7 6
36					1
37					1
38					1
39				No transactions.....	
40				do.....	
41	Mayaguez	Held in quarantine to complete period.	Nov. 29		2

REPORTS FROM STATE AND

Number.	Name of station.	Week ended.	Name of vessel.	Date of arrival.	Port of departure.
1	Anclote, Fla.....	Dec. 16			
2	Baltimore, Md.....	do.			
3	Bangor, Me.....	do.			
4	Boston, Mass.....	do.			
5	Carrabelle, Fla.....	do.			
6	Cedar Keys, Fla.....	do.			
7	Charleston, S. C.....	Dec. 9			
		Dec. 16			
8	Charlotte Harbor, Fla.....	do.			
9	Elizabeth River, Va.....	do.			
10	Galveston, Tex.....	Dec. 9			
11	Gardiner, Oreg.....	Dec. 2			
12	Key West, Fla.....	Dec. 9			
		Dec. 16			
13	Los Angeles, Cal.....	Dec. 9			
14	Mayport, Fla.....	Dec. 16			
15	Mobile Bay, Ala.....	Dec. 9			
16	New Bedford, Mass.....	Dec. 16			
17	New Orleans, La.....	do.			
18	Newport News, Va.....	do.			
19	Newport, R. I.....	do.			
20	New York, N. Y.....	do.			
21	Pass Cavallo, Tex.....	do.			
22	Pensacola, Fla.....	do.			
23	Port Royal, S. C.....	do.			
24	Providence, R. I.....	do.			
25	Quintana, Tex.....	do.			
26	St. Helena Entrance, S. C.....	do.			
27	Tampa Bay, Fla.....	do.			

MUNICIPAL QUARANTINE STATIONS.

Number.	Destination.	Treatment of vessel, passengers, and cargo.	Date of departure.	Remarks.	Vessels inspected and passed.
1				No report.	
2				do.	
3				do.	
4				do.	
5				do.	
6				do.	
7					3
8					4
9				No report.	
10					2
11					12
12				No report.	
13					9
14				No transactions.	
15				No report.	
16					12
17				No report.	
18				do.	
19				do.	
20				do.	
21				do.	
22				do.	
23				do.	
24				No transactions.	
25				No report.	
26				do.	
27				do.	

CALIFORNIA—Oakland.—Month of November, 1899. Estimated population, 75,000. Total number of deaths, 83, including diphtheria, 1, and 14 from phthisis pulmonalis.

Sacramento.—Month of November, 1899. Estimated population, 30,000. Total number of deaths, 34, including diphtheria, 2, and 7 from phthisis pulmonalis.

COLORADO—Denver.—Month of November, 1899. Estimated population, 170,000. Total number of deaths, 173, including diphtheria, 6; enteric fever, 12; measles, 2; scarlet fever, 2; whooping cough, 2, and 44 from phthisis pulmonalis.

CONNECTICUT.—Reports to the State board of health for the month of November, 1899, from 164 towns having an aggregate estimated population of 906,129, show a total of 980 deaths, including diphtheria, 43; enteric fever, 24; measles, 1; scarlet fever, 2; whooping cough, 5, and 101 from phthisis pulmonalis.

Bridgeport.—Month of November, 1899. Estimated population, 65,000. Total number of deaths, 68, including enteric fever 1, and 13 from phthisis pulmonalis.

IOWA—Davenport.—Month of November, 1899. Estimated population, 40,000. Total number of deaths, 26, including enteric fever, 1, and 4 from phthisis pulmonalis.

LOUISIANA—New Orleans.—Month of November, 1899. Estimated population, 300,000—white, 210,000; colored, 90,000. Total number of deaths, 586—white, 361, colored, 225, including diphtheria, 4; enteric fever, 13; scarlet fever, 1; yellow fever, 5, and 75 from phthisis pulmonalis.

MARYLAND—Baltimore.—Month of November, 1899. Estimated population, 541,000—white, 463,000; colored, 78,000. Total number of deaths, 663—white, 518, colored, 145, including diphtheria, 37; enteric fever, 14; scarlet fever, 2; whooping cough, 1, and 75 from phthisis pulmonalis.

MASSACHUSETTS—Newton.—Month of November, 1899. Estimated population, 27,590. Total number of deaths, 37, including diphtheria, 2; enteric fever, 1, and 3 from phthisis pulmonalis.

Worcester.—Month of November, 1899. Estimated population, 108,463. Total number of deaths, 143, including diphtheria, 5; enteric fever, 2; scarlet fever, 2, and 20 from phthisis pulmonalis.

MICHIGAN.—Reports to the State board of health, Lansing, for the week ended December 9, 1899, from 63 observers, indicate that inflammation of kidney and intermittent fever decreased in area of prevalence. Phthisis pulmonalis was reported present at 219, scarlet fever at 77, enteric fever at 65, measles at 49, diphtheria at 28, whooping cough at 25, smallpox at 6, and cerebro-spinal meningitis at 3 places.

Grand Rapids.—Month of November, 1899. Estimated population, 90,000. Total number of deaths, 88, including diphtheria, 4; enteric fever, 6; whooping cough, 1, and 6 from phthisis pulmonalis.

MINNESOTA—*Winona*.—Month of November, 1899. Estimated population, 24,000. Total number of deaths, 16, including 1 from phthisis pulmonalis.

NEW HAMPSHIRE—*Concord*.—Two weeks ended December 9, 1899. Estimated population, 18,000. Total number of deaths, 11. No deaths from contagious diseases.

NEW JERSEY—*Passaic*.—Two weeks ended December 9, 1899. Total number of deaths, 37, including diphtheria, 1, and 1 from enteric fever.

NEW YORK—*Auburn*.—Month of November, 1899. Estimated population, 35,000. Total number of deaths, 51, including diphtheria, 1; whooping cough, 1, and 2 from phthisis pulmonalis.

Buffalo.—Month of November, 1899. Estimated population, 370,000. Total number of deaths, 354, including diphtheria, 12; enteric fever, 13; measles, 21; scarlet fever, 4; whooping cough, 3, and 26 from phthisis pulmonalis.

RHODE ISLAND—*Newport*.—Month of November, 1899. Estimated population, 21,500. Total number of deaths, 22, including 3 from phthisis pulmonalis.

TENNESSEE—*Chattanooga*.—Month of November, 1899. Estimated population, 40,000. Total number of deaths, 41, including enteric fever, 2, and 9 from phthisis pulmonalis.

Nashville.—Estimated population, 110,834—white, 69,389; colored, 41,445. Total number of deaths, 133, including diphtheria, 6; enteric fever, 5; whooping cough, 3, and 17 from phthisis pulmonalis.

TEXAS—*San Antonio*.—Month of November, 1898. Estimated population, 63,000. Total number of deaths, 94, including diphtheria, 1; enteric fever, 4; smallpox, 1, and 21 from phthisis pulmonalis.

WASHINGTON—*Tacoma*.—Month of November, 1899. Estimated population, 50,000. Total number of deaths, 29, including enteric fever, 2; scarlet fever, 1, and 4 from phthisis pulmonalis.

WISCONSIN—*Milwaukee*.—Month of October, 1899. Estimated population, 285,000. Total number of deaths, 302, including diphtheria, 9; enteric fever, 10; measles, 1; scarlet fever, 6, and 24 from phthisis pulmonalis.

MORTALITY TABLE, CITIES OF THE UNITED STATES.

Cities.	Week ended.	Population, U. S. Census of 1890.	Total deaths from all causes.	Deaths from—								
				Tuberculosis.	Yellow fever.	Smallpox.	Varicella.	Cholera.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.
Allegheny, Pa.	Dec. 16.	105,287	46	1					3		2	
Amesbury, Mass.	do.	9,798	0									
Ashtabula, Ohio.	Dec. 8.	8,338	7	1								
Do.	Dec. 15.	8,338	4									
Baltimore, Md.	Dec. 16.	434,439	181	26					3		14	
Bay City, Mich.	Dec. 9.	27,839	6									
Do.	Dec. 16.	27,839	2								1	
Binghamton, N. Y.	do.	35,015	12	3							1	
Boston, Mass.	do.	448,477	251	33					1	3	10	
Bristol, R. I.	Dec. 9.	5,478	1									
Do.	Dec. 16.	5,478	12									
Brockton, Mass.	Dec. 2.	27,294	7	1								
Do.	Dec. 9.	27,294	8									
Cambridge, Mass.	Dec. 16.	70,028	26	3							2	
Camden, N. J.	do.	58,313	26								1	
Charleston, S. C.	Dec. 9.	a 54,955	b 37	4								1
Chelsea, Mass.	do.	27,909	15						1		4	2
Do.	Dec. 16.	27,909	16								1	
Chicago, Ill.	do.	1,099,850	481	57					6	10	14	4
Chillicothe, Mass.	Dec. 9.	14,050	6									
Do.	Dec. 16.	14,050	2	1								
Chillicothe, Ohio.	Dec. 9.	11,288	3									1
Cincinnati, Ohio.	Dec. 16.	296,908	25								2	
Cleveland, Ohio.	do.	261,353	98	2					2		2	1
Concord, N. H.	do.	17,044	6	1							2	
Dayton, Ohio.	do.	61,220	22	1								
Dubois, Pa.	do.	6,149	1									
Dunkirk, N. Y.	Dec. 9.	9,416	4									
Erie, Pa.	do.	40,634	10	1							1	
Do.	Dec. 16.	40,634	12	4								
Evansville, Ind.	do.	50,756	11									
Everett, Mass.	Dec. 9.	11,068	5	1								
Fall River, Mass.	Dec. 16.	74,398	30	5							1	
Fitchburg, Mass.	Dec. 9.	22,037	11	1						1		
Grand Rapids, Mich.	Dec. 16.	60,278	24	1							2	1
Green Bay, Wis.	Dec. 10.	9,069	1									
Do.	Dec. 17.	9,069	4									
Greenville, S. C.	Dec. 9.	8,607	4									
Holyoke, Mass.	Dec. 16.	35,637	11								1	
Honolulu, Hawaii.	do.	35,000	31	1					2			
Jacksonville, Fla.	Dec. 9.	17,201	15									1
Do.	Dec. 16.	17,201	16	3								
Jersey City, N. J.	Dec. 10.	163,003	71	10							5	
Do.	Dec. 17.	163,003	61	4							4	1
Johnstown, Pa.	Dec. 16.	21,805							1			
Lawrence, Mass.	Dec. 9.	44,654	19								1	
Los Angeles, Cal.	do.	50,395	30	5					1		1	
Louisville, Ky.	Dec. 14.	161,129	60	11					2			
Lowell, Mass.	Dec. 16.	77,696	33	4							2	
Lynchburg, Va.	do.	19,709	4									
McKeesport, Pa.	Dec. 9.	20,741	12									
Do.	Dec. 16.	20,741	8	1								
Malden, Mass.	do.	23,031	5						1			
Manchester, N. H.	Dec. 9.	44,126	23	2								
Do.	Dec. 16.	44,126	22	2							1	1
Massillon, Ohio.	Dec. 9.	10,092	2						1			
Medford, Mass.	Dec. 16.	11,079	14								2	
Melrose, Mass.	Dec. 9.	8,519	0									
Michigan City, Ind.	do.	10,776	3									
Do.	Dec. 16.	10,776	3								1	
Milwaukee, Wis.	Dec. 9.	204,468	83	9					2	3	4	
Do.	Dec. 16.	204,468	64	5						2	2	2
Minneapolis, Minn.	Dec. 9.	164,738	27	3								
Mobile, Ala.	Dec. 12.	31,076	14	5								
Nashville, Tenn.	Dec. 16.	76,168	29	3								
New Bedford, Mass.	do.	40,733	18						1		1	
Newburyport, Mass.	Dec. 9.	13,947	4									
New Orleans, La.	do.	242,039	154	19					10		1	2
Newton, Mass.	Dec. 16.	24,379	9	2								
New York, N. Y.	do.	c 3,550,053	1,222	154					9	11	37	13
Norristown, Pa.	do.	19,791	5	1								
North Adams, Mass.	do.	16,074	4									

a Estimated population, 65,165—white, 23,870; colored, 36,295. b White, 12; colored, 25.
c Estimated.

MORTALITY TABLE, CITIES OF THE UNITED STATES—Continued.

Cities.	Week ended.	Population U. S. census of 1890.	Total deaths from all causes.	Deaths from—										
				Tuberculosis.	Yellow fever.	Smallpox.	Variceloid.	Cholera.	Typhusfever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
Oakland, Cal.....	Nov. 11....	48,682	15	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Nov. 18....	48,982	20	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Do.....	Nov. 25....	48,682	25	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 2.....	48,682	17	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Omaha, Nebr.....	Dec. 9.....	140,452	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oneonta, N. Y.....	Dec. 16....	6,272	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Palmer, Mass.....	do.....	6,520	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Philadelphia, Pa.....	do.....	1,046,964	445	46	.....	.....	.....	.....	3	2	26	.....	.....	2
Pittsburg, Pa.....	Dec. 9.....	238,617	100	2	.....	.....	.....	.....	12	.....	2	.....	.....	.....
Do.....	Dec. 16....	238,617	87	8	.....	.....	.....	.....	9	.....	4	1	.....	1
Pittsfield, Mass.....	Dec. 9.....	17,281	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pittston, Pa.....	Dec. 16....	10,302	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Plainfield, N. J.....	do.....	11,267	8	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
Portsmouth, Va.....	Dec. 9.....	13,268	7	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Do.....	Dec. 16....	13,268	9	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Providence, R. I.....	do.....	132,146	71	7	.....	.....	.....	.....	2	1	3	.....	.....	2
Reading, Pa.....	Dec. 11....	58,661	31	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
Do.....	Dec. 18....	58,661	35	1	.....	.....	.....	.....	1	2	2	.....	.....	.....
Salt Lake City, Utah.....	Dec. 9.....	44,843	11	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Do.....	Dec. 16....	44,343	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Jose, Cal.....	Dec. 9.....	18,060	5	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Santa Barbara, Cal.....	do.....	5,864	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scranton, Pa.....	Dec. 16....	75,215	43	.....	.....	.....	.....	.....	.....	.....	2	3	.....	.....
Seattle, Wash.....	Dec. 2.....	42,837	6	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Do.....	Dec. 9.....	42,837	11	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shreveport, La.....	Dec. 16....	11,979	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Somerville, Mass.....	do.....	40,152	16	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....
Steelton, Pa.....	do.....	9,250	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tacoma, Wash.....	Dec. 9.....	36,006	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Taunton, Mass.....	Dec. 16....	25,448	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waltham, Mass.....	Dec. 9.....	18,707	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 16....	18,707	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Warren, Ohio.....	Dec. 9.....	5,973	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do.....	Dec. 16....	5,973	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington, D. C.....	Dec. 9.....	230,392	114	15	.....	.....	.....	.....	6	1	5	.....	.....	.....
West Tampa, Fla.....	Dec. 16....	4,000	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wheeling, W. Va.....	Dec. 2.....	35,013	12	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Do.....	Dec. 9.....	35,013	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wichita, Kans.....	Dec. 16....	23,853	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wilmington, Del.....	do.....	61,431	29	2	.....	.....	.....	.....	.....	1	.....	3	.....	.....
Worcester, Mass.....	Dec. 8.....	84,655	37	4	.....	.....	.....	.....	.....	2	.....	3	.....	.....
Do.....	Dec. 15....	84,655	32	2	.....	.....	.....	.....	.....	.....	1	2	.....	.....
Youngstown, Ohio.....	Dec. 16....	32,220	9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table of temperature and rainfall, week ended December 11, 1899.

[Received from Department of Agriculture, Weather Bureau.]

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Atlantic Coast:						
Eastport, Me.....	29		3	.91		.51
Portland, Me.....	31		2	.83		.44
Northfield, Vt.....	25		6	.70		.44
Boston, Mass.....	34	0		.85		.85
Vineyard Haven, Mass.....	40		3	.77		.61
Nantucket, Mass.....	39		1	.95		.83
Woods Hole, Mass.....	37		1	.63		.70
Block Island, R. I.....	39		2	.82		.80
New Haven, Conn.....	35		2	.77		.77
Albany, N. Y.....	32		4	.63		.44
New York, N. Y.....	37		1	.74		.74
Harrisburg, Pa.....	37		2	.68		.68
Philadelphia, Pa.....	37	0		.59		.59
New Brunswick, N. J.....	39		5	.83		.82
Atlantic City, N. J.....	39		1	.84		.84
Baltimore, Md.....	39		2	.70		.70
Washington, D. C.....	38	0		.63		.61
Lynchburg, Va.....	40		1	.63		.63
Cape Henry, Va.....	46		3	.84		.84
Norfolk, Va.....	44		1	.83		.83
Charlotte, N. C.....	45		4	.84		.83
Raleigh, N. C.....	45		2	.55		.55
Kittyhawk, N. C.....	49		3	.91		.91
Hatteras, N. C.....	50			1.19		
Wilmington, N. C.....	49		1	.63		.63
Columbia, S. C.....	50		5	.63		.56
Charleston, S. C.....	52	0		.70		.70
Augusta, Ga.....	49		3	.77		.74
Savannah, Ga.....	53		1	.68		.68
Jacksonville, Fla.....	56	0		.63		.63
Jupiter, Fla.....	68	1		.58		.42
Key West, Fla.....	70	1		.36	.20	
Gulf States:						
Atlanta, Ga.....	48		4	.91		.76
Tampa, Fla.....	64		3	.49		.18
Pensacola, Fla.....	56		1	.84		
Mobile, Ala.....	53	1		.98	2.81	
Montgomery, Ala.....	51		2	1.01	2.27	
Vicksburg, Miss.....	52	2		1.12	3.33	
New Orleans, La.....	57	2		.98	.18	
Shreveport, La.....	51	1		1.05	.98	
Fort Smith, Ark.....	45	2		.71	.06	
Little Rock, Ark.....	47	1		.98	1.83	
Palestine, Tex.....	53	1		.85	.23	
Galveston, Tex.....	59	0		.91	2.87	
San Antonio, Tex.....	56	1		.43	1.54	
Corpus Christi, Tex.....	61	0		.31	1.44	
Ohio Valley and Tennessee:						
Memphis, Tenn.....	45	3		.88	.61	
Nashville, Tenn.....	43	1		.80	1.74	
Chattanooga, Tenn.....	45		5	.91	.81	
Knoxville, Tenn.....	41		2	.91		.91
Louisville, Ky.....	40		1	.91		
Indianapolis, Ind.....	35	3		.71	.25	
Cincinnati, Ohio.....	38	0		.70	.25	
Columbus, Ohio.....	35		1	.66	.06	
Parkersburg, W. Va.....	39	0		.77		.66
Pittsburg, Pa.....	37	1		.63		.67
Lake Region:						
Oswego, N. Y.....	32		3	.77		.23
Rochester, N. Y.....	31		1	.63		.36
Buffalo, N. Y.....	32		1	.77	.67	
Erie, Pa.....	34	0		.77		.30
Cleveland, Ohio.....	32	2		.63		.08
Sandusky, Ohio.....	34	1		.56		.18
Toledo, Ohio.....	33	3		.56		.08
Detroit, Mich.....	31	3		.61		.01
Lansing, Mich.....	30	3		.45	.02	
Port Huron, Mich.....	30	1		.56		.12
Alpena, Mich.....	27	3		.56		.28
Sault Ste. Marie, Mich.....	25		1	.49	.21	
Marquette, Mich.....	25	5		.61		.25
Green Bay, Wis.....	27	4		.56		.37
Grand Haven, Mich.....	31	4		.63	.54	
Milwaukee, Wis.....	27	7		.43	.38	
Chicago, Ill.....	30	5		.56	.18	
Duluth, Minn.....	20	9		.35	.41	

a The figures in these columns represent the average daily departure.

Table of temperature and rainfall, week ended December 11, 1899—Continued.

Locality.	Temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Upper Mississippi Valley:						
St. Paul, Minn.	21	9		.29	.92	
La Crosse, Wis.	26	6		.35	.10	
Dubuque, Iowa	27	6		.42	.12	
Davenport, Iowa	29	8		.42	.29	
Des Moines, Iowa	29	5		.35	.94	
Keokuk, Iowa	32	9		.48		.11
Springfield, Ill.	36	5		.63		.06
Cairo, Ill.	41	4		.77	1.12	
St. Louis, Mo.	38	6		.70		.39
Missouri Valley:						
Columbia, Mo.				.49	.08	
Springfield, Mo.	41	1		.70	.27	
Kansas City, Kans.	34	6		.40	.31	
Topeka, Kans.	37	2		.21	.46	
Wichita, Kans.	40		1	.21	.54	
Concordia, Kans.	35	3		.13	1.15	
Lincoln, Nebr.	34	2		.14	.91	
Omaha, Nebr.	30	4		.25	.93	
Sioux City, Iowa	29	4		.28	.88	
Yankton, S. Dak.	25	8		.21	.52	
Valentine, Nebr.	30	1		.07		.07
Huron, S. Dak.	22	6		.14		.14
Pierre, S. Dak.	27	3		.07		.07
Moorhead, Minn.	15	8		.21		.21
Bismarck, N. Dak.	19	10		.14		.14
Williston, N. Dak.	17	11		.14		.09
Rocky Mountain Region:						
Havre, Mont.	25	6		.14		.14
Helena, Mont.	31	2		.21		.21
Miles City, Mont.	22	8		.07		.07
Rapid City, S. Dak.	33	0		.07		.02
Spokane, Wash.	35		1	.54	.29	
Walla Walla, Wash.	42		1	.45	.56	
Baker City, Oreg.	31		1	.39	.93	
Winnemucca, Nev.	33		2	.28	.01	
Boise, Idaho	35		1	.42	.18	
Salt Lake City, Utah	33		3	.35		.08
Lander, Wyo.	24		7	.11	.45	
Cheyenne, Wyo.	31		3	.07	.06	
North Platte, Nebr.	31		2	.13		.07
Denver, Colo.	35		5	.14	.22	
Pueblo, Colo.	37		7	.09		.09
Dodge City, Kans.	35	1		.14	.00	
Oklahoma, Okla.	44		2	.50	.47	
Amarillo, Tex.	38		1	.20	.37	
Abilene, Tex.	50		2	.35	2.14	
Santa Fe, N. Mex.	32		2	.21		.14
El Paso, Tex.	46		2	.14		.11
Phoenix, Ariz.	54		1	.21		.21
Pacific Coast:						
Seattle, Wash.	43	2		1.22		.30
Tacoma, Wash.	42	2		1.68	.46	
Fort Canby, Wash.	45	2		2.29	1.07	
Portland, Oreg.	43	1		1.69	.71	
Roseburg, Oreg.	44	0		1.35	1.01	
Eureka, Cal.	49	0		1.76	1.27	
Redbluff, Cal.	48		1	1.13		.70
Carson City, Nev.	37		1	.49		.48
Sacramento, Cal.	47		1	.87		.45
San Francisco, Cal.	52	0		1.07		.73
Fresno, Cal.	47		1	.84	.05	
San Luis Obispo, Cal.	54		1	1.02		.95
Los Angeles, Cal.	56	0		.84		.83
San Diego, Cal.	57	0		.49		.49
Yuma, Ariz.	59		5	.07		.07

a The figures in these columns represent the average daily departure.

FOREIGN.

[Reports received from United States consuls through the Department of State and from other sources.]

Cholera, yellow fever, plague, and smallpox as reported to the Surgeon-General United States Marine-Hospital Service, June 30, 1899, to December 22, 1899.

[For reports received from January 1 to June 30, 1899, see PUBLIC HEALTH REPORTS for June 30.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Matrah.....	Sept. 25-Oct. 11...		135	
India:				
Bombay.....	June 6-Nov. 14...		21	
Calcutta.....	May 13-Nov. 4...		319	
Kurrachee.....	Oct. 1-Oct. 21...	18	21	
Madras.....	May 20-Sept. 1...		10	
Japan:				
Fukuoka Ken.....	July 26-Aug. 20...	1		
Kanagawa Ken.....	do.....	3		
Miye Ken.....	do.....	1		
Osaka and Hogo.....	June 10-Aug. 26...	4	3	
Tokyo Fu.....	July 26-Aug. 31...	31	7	
Yokohama.....	July 16-Aug. 26...	3	3	
	Oct. 8-Oct. 1...	1		
Persia:				
Mohamera.....	Nov. 9.....	7		
Straits Settlements:				
Singapore.....	Aug. 1-Aug. 31...		1	
	Oct. 8-Oct. 28...		11	
Turkey:				
Amara.....	Nov. 9.....			Cholera reported.
Bassorah.....	Oct. 16-Oct. 22...		25	
Fao.....	Nov. 17.....			Do.
Kurna.....	Nov. 9.....			Do.
Nassirich.....	do.....			Do.
Shatra.....	Nov. 18.....			Do.
Shoon.....	Nov. 9.....			Do.
Sookelshooyookh.....	do.....			Do.

YELLOW FEVER.

Argentina:				
Buenos Ayres.....	Apr. 1-Apr. 30...		4	
	June 1-June 30...		8	
	Aug. 1-Aug. 31...	1	1	
Brazil:				
Bahia.....	June 3-Aug. 12...	177	85	
	Oct. 15-Oct. 21...	1	1	
Para.....	June 1-June 30...		19	
Rio de Janeiro.....	May 19-Nov. 3...		100	
St. Felix.....	June 7.....			Reported present.
Colombia:				
Barranquilla.....	June 10-June 24...	2	2	
	Aug. 6-Sept. 16...	2	2	
	Oct. 22-Nov. 18...	2	2	
Cartagena.....	Aug. 30-Sept. 9...	2	1	
Colon.....	Aug. 28-Sept. 3...	1	1	
Panama.....	June 16-Aug. 8...	88	45	
	Aug. 15-Sept. 19...	27	9	
	Nov. 30-Dec. 12...	13	6	
Costa Rica:				
Alajuela.....	Aug. 4-Sept. 24...	60	21	
Heredia.....	do.....	1		
Port Limon.....	Aug. 18-Aug. 29...	2	1	
Punta Arenas.....	Aug. 4.....			Yellow fever reported.
Cuba:				
Cienfuegos.....	July 23-July 29...	1	1	Doubtful.
Cristo.....	Aug. 13-Aug. 14...	1		
Daiquiri.....	Aug. 27-Sept. 2...	1		
Guantanamo.....	Oct. 13.....	1		On ss. Flandria.

*Cholera, yellow fever, plague, and smallpox, etc.—Continued.***YELLOW FEVER—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Cuba—Continued.				
Havana	June 15–Sept. 30...	133	42	
	Oct. 1–Nov. 4...	82	25	
	Nov. 5–Dec. 9...	51	20	
Manzanillo	July 2–Oct. 7...	11	2	
Matanzas	June 17–July 27...	2	1	One doubtful.
	Aug. 6–Aug. 12...	1	1	
	Oct. 3.....	1	.....
	Dec. 2.....	1	.....
Nuevitas	Sept. 10–Sept. 16...	1	.....
	Nov. 14.....	1	.....	On transport Ingalls.
Puerto Principe.....	To Aug. 9.....	39	13	
	Nov. 18.....	1	.....
Santa Clara.....	Oct. 27.....	1	1	
Santiago.....	June 10–Nov. 18...	228	50	
Sancti Spiritu.....	Aug. 24.....	2	.....
Curacao.....	Oct. 8–Oct. 14...	1	1	
Mexico:				
Amealco .....	.....do.....	.....	.....	Yellow fever reported.
Chilpanzingo	Sept. 14.....	.....	.....	Yellow fever prevalent.
Cinchapa	Aug. 23.....	.....	.....	Yellow fever reported.
Cordoba.....	June 21.....	23	14	
	May 1–Aug. 26...	.....	133	
Cosamalaoapam	Aug. 21.....	1	.....
Hidalgo	Aug. 23.....	.....	.....	Do.
Jalapa.....	Aug. 9.....	.....	5	
Juchitan	Aug. 23.....	.....	.....	Do.
Merida	July 1.....	1	.....
Orizaba	May 1–July 24...	.....	11	
	Aug. 29–Sept. 30...	.....	66	
	Oct. 1–Nov. 8...	.....	36	
Progreso	July 25.....	2	1	Do.
San Geronimo	Aug. 23.....	.....	.....
San Juan la Junta	Aug. 24.....	.....	.....	Do.
San Lorenzo .....	.....do.....	.....	.....	Do.
Tampico	July 1–July 7...	1	1	
	Sept. 16–Sept. 29...	4	1	
	Oct. 2.....	7	.....
Tapona.....	Aug. 23.....	.....	.....	Do.
Tuxpan.....	July 30–Nov. 6...	.....	69	
Vera Cruz.....	June 15–Nov. 24...	.....	245	
	Dec. 8–Dec. 14...	.....	3	
Victoria	Oct. 6.....	.....	.....	Do.
Nicaragua:				
Bluefields	Sept. 23–Sept. 30...	.....	a 1	
San Salvador:				
San Salvador.....	June 30–Aug. 1...	3	1	
	Sept. 1.....	.....	.....	Do.

PLAGUE.

Arabia:				
Djiddah	June 30.....	.....	.....	Plague reported.
Austria:				
Trieste.....	Nov. 4.....	1	1	
Brazil:				
Santos.....	Oct. 18–Nov. 18...	28	11	
Sao Paulo.....	Oct. 29–Nov. 17...	2	.....
China:				
Amoy.....	July 1–Aug. ....	.....	540	
Hongkong	Apr. 11–Oct. 28...	1,640	1,582	
	Nov. 29–Dec. 4...	1	1	
Fuchau.....	Aug. 5–Aug. 26...	.....	.....	Do.
Niuchwang	Aug. 18.....	.....	.....	Do.
Yingkou .....	.....do.....	.....	.....	Do.
Egypt:				
Alexandria.....	May 4–Sept. 30...	93	44	
	Nov. 9.....	1	.....
England:				
Plymouth.....	Oct. 9.....	1	.....	On steamship Peninsula.
French Ivory Coast Colony:				
Grand Bassam.....	June 7.....	200	.....
India:				
Bengal.....	Oct. 2–Oct. 15...	.....	74	
Bombay, Presidency of	Sept. 10–Sept. 23...	.....	8,659	

a This is an error due to a misunderstanding of the consul's report.

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
<i>India—Continued.</i>				
<i>Bombay, Presidency of—Cont.</i>				
Ahmedabad District.....	Oct. 16-Nov. 11.....	16	16	TOTALS TO AUGUST 11, 1899 (a).
Ahmednugger District.....	Aug. 5-Aug. 11.....	45	31	Total, 1,273 cases; 956 deaths.
	Oct. 9-Nov. 11.....	694	694	
Akalkot State.....	Oct. 2-Oct. 8.....	7	7	
Aundh State.....	Aug. 5-Aug. 11.....	26	17	Total, 1,951 cases; 1,383 deaths.
	Oct. 2-Nov. 11.....	510	510	
Belgaum District.....	Aug. 5-Aug. 11.....	750	598	Total, 29,300 cases; 22,042 d'ths.
	Oct. 2-Nov. 11.....	2,787	2,787	
Baroda Territory.....	Aug. 5-Aug. 11.....	29	19	Total, 8,005 cases; 5,982 deaths.
	Oct. 2-Oct. 29.....	35	35	
Bhor State.....	Oct. 2-Nov. 11.....	139	139	
Bijapore District.....	Aug. 5-Aug. 11.....	98	82	Total, 2,626 cases; 2,130 deaths.
	Oct. 2-Nov. 11.....	891	891	
Broach District.....	Aug. 5-Aug. 11.....	37	27	Total, 1,530 cases; 1,146 deaths.
	Oct. 2-Oct. 29.....	17	17	
Cutch State.....	Aug. 5-Aug. 11.....	29	27	Total, 10,477 cases; 8,634 d'ths.
	Oct. 2-Nov. 11.....	30	30	
Dharwar District.....	Aug. 5-Aug. 11.....	143	95	Total, 38,754 cases; 31,307 d'ths.
	Oct. 2-Nov. 11.....	2,351	2,351	
Hyderabad District.....	Oct. 1-Nov. 11.....	413	413	
Janjira State.....	Aug. 5-Aug. 11.....	0	1	Total, 413 cases; 269 deaths.
	Oct. 2-Oct. 29.....	13	13	
Kaira District.....	Aug. 5-Aug. 11.....	58	46	Total, 2,069 cases; 1,578 deaths.
	Oct. 2-Nov. 11.....	36	36	
Kathiawar State.....	do.....	38	38	
Kanara District.....	Aug. 5-Aug. 11.....	11	11	Total, 433 cases; 311 deaths.
	Oct. 2-Nov. 11.....	83	83	
Khandesh District.....	Aug. 5-Aug. 11.....	1	0	Total, 1,000 cases; 810 deaths.
	Oct. 2-Oct. 29.....	7	7	
Kolaba District.....	Aug. 5-Aug. 11.....	15	9	Total, 2,913 cases; 2,480 deaths.
	Oct. 9-Nov. 11.....	15	18	
Kolhapore and Southern Mahratta Country.	do.....	624	500	Total, 19,185 cases; 14,408 d'ths.
	Oct. 2-Nov. 11.....	3,421	3,421	Total, 10,684 cases; 8,279 d'ths.
Kurrachee.....	Aug. 5-Aug. 11.....	1	1	
	Oct. 2-Nov. 11.....	12	12	Total, 6,573 cases; 5,084 deaths.
Nassik District.....	Aug. 5-Aug. 11.....	470	361	
	Oct. 2-Nov. 11.....	1,945	1,945	Total, 20,162 cases; 15,480 d'ths.
Poona District.....	Aug. 5-Aug. 11.....	1,400	1,150	
	Oct. 2-Nov. 11.....	3,035	3,035	Total, 442 cases; 341 deaths.
Poona City.....	Oct. 16-Nov. 11.....	166	166	
Rewa Kantha.....	Aug. 5-Aug. 11.....	26	25	Total, 742 cases; 618 deaths.
Rutnagherry District.....	do.....	18	15	
	Oct. 2-Nov. 11.....	81	81	Total, 27,087 cases; 21,211 d'ths.
Satara District.....	Aug. 5-Aug. 11.....	228	177	
	Oct. 2-Nov. 11.....	2,888	2,888	Total, 62 cases; 38 deaths.
Savanur State.....	Aug. 5-Aug. 11.....	1	1	
	Oct. 2-Nov. 11.....	189	189	Total, 4,912 cases; 3,960 deaths.
Sholapore District.....	Aug. 5-Aug. 11.....	29	24	
	Oct. 2-Nov. 11.....	385	385	Total, 7,947 cases; 5,842 deaths.
Surat District.....	Aug. 5-Aug. 11.....	61	40	
	Oct. 2-Nov. 11.....	319	319	Total, 12,366 cases; 9,794 d'ths.
Thana District.....	Aug. 5-Aug. 11.....	108	86	
	Oct. 2-Nov. 11.....	186	186	
				Grand total, 220,907 cases; 164,983 deaths.
Bombay City.....	May 27-Nov. 11.....	1,643	1,643	
Calcutta.....	May 13-Nov. 11.....	689	689	
Central Provinces.....	Oct. 9-Nov. 11.....	165	165	
Hyderabad State.....	Oct. 2-Oct. 29.....	989	989	
Kurrachee City.....	Aug. 6-Nov. 11.....	37	37	
Madras Presidency.....	Oct. 2-Nov. 11.....	57	57	
Mysore State.....	do.....	803	803	
Punjab.....	Oct. 16-Nov. 11.....	10	10	
<i>Japan:</i>				
Kanagawa Ken.....	July 1-July 10.....	2	1	
Kobe.....	Nov. 7-Nov. 30.....	11	10	Plague reported epidemic.
Osaka and Hiogo.....	Nov. 5-Nov. 18.....	4	3	
Nagasaki Ken.....	Nov. 15.....	2	2	
Taiwan, Formosa.....	do.....	14	6	
Tamsui, Formosa.....	Apr. 1-July 26.....	1,550	1,236	Total since outbreak, 2,468 cases, 1,866 deaths.
Lorenzo Marquez:				
Lorenzo Marquez.....	Nov. 4.....	3	3	
Magude.....	Sept. 22.....			Plague reported.

a Extract from Indian Times sent by United States consul.

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Madagascar:				
Tamatave.....	Sept. 10-Oct. 29...	15	8	
Mauritius.....	May 4-May 31...	1	5	
	July 14-July 20...	30	29	
	Aug. 10-Aug. 28...	68	42	
	Aug. 25.....			Plague reported.
Mozambique.....				
Paraguay:				
Asuncion.....	Sept. 24-Oct. 8...		5	Do.
Persia:				
Bushire.....	June 8.....			Do.
	May 26-June 18...		40	
Portugal:				
Leixoes.....	Oct. 30.....			Do.
Lisbon.....	Aug. 16.....			Do.
Do.....	Nov. 12.....	1	1	
Oporto.....	Aug. 16-Oct. 31...	223	77	
	Nov. 1-Nov. 20...	41	17	
Réunion (Isle de).....	July 24.....	1	1	Do.
Russia:				
Kolobovka, Astrakhan.....	Aug. 1-Aug. 10...		21	
St. Petersburg.....	July 23-July 29...	1		
	Aug. 6-Aug. 12...	1		
Straits Settlements:				
Penang.....	Jan. 4-July 21...	49	39	
Singapore.....	May 27-June 17...	0	3	
Turkey:				
Bassorah.....	June 19.....	1	1	

SMALLPOX.

Arabia:				
Aden.....	May 1-May 31...		1	
Argentina:				
Bueno Ayres.....	Apr. 1-Aug. 31...		6	
Austria:				
Budapest.....	June 16-June 24...	2		
	July 31-Aug. 6...	1		
Belgium:				
Antwerp.....	June 10-Nov. 25...	50	19	
Ghent.....	June 23-July 1...		1	
	Nov. 5-Nov. 11...		2	
Bohemia:				
Prague.....	Aug. 27-Nov. 25...	55		
Brazil:				
Bahia.....	June 3-Sept. 16...	5		
Ceara.....	Oct. 1-Oct. 31...		1	
Rio de Janeiro.....	May 19-Nov. 3...	1,664	916	
Canary Islands:				
Santa Cruz de Tenerife.....	Sept. 17-Sept. 23...		2	
China:				
Fuchau.....	Sept. 16.....			Smallpox reported always prevalent.
Hongkong.....	May 6-June 10...	2	1	
	Oct. 28-Nov. 4...	1	1	
Colombia:				
Panama.....	July 12-July 24...	2		
	July 26-Aug. 1...	1	1	
Cuba:				
Casilda.....	Aug. 1-Aug. 31...		1	
Havana.....	June 30-July 6...	5	1	
Sancti Spiritu.....	June 7.....			Reported present.
Santiago.....	July 1-July 8...	1		
Egypt:				
Alexandria.....	Aug. 20-Aug. 26...		1	
Cairo.....	May 20-Nov. 4...		31	
England:				
Bradford.....	Oct. 30-Nov. 25...	3		
Hull.....	Mar. 1-Dec. 5...	700	105	
Liverpool.....	June 10-June 17...		1	
London.....	June 10-Aug. 5...	5	1	
	Nov. 12-Nov. 25...	2		
France:				
Nantes.....	June 1-June 30...	1		
Marseilles.....	June 25-July 2...	1		
	Nov. 29-Dec. 4...		9	
	Dec. 11.....			Smallpox epidemic.
Paris.....	July 2-July 8...		1	

Cholera, yellow fever, plague, and smallpox, etc.—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Germany:				
Dusseldorf	Sept. 3-Sept. 9...		1	
Gibraltar	June 4-June 21...	1		
	Oct. 23-Nov. 5...	2		
Greece:				
Athens	June 10-Dec. 2...	191	47	
India:				
Bombay	May 27-Nov. 14...		152	
Calcutta	May 13-June 10...		2	
Madras	May 20-Nov. 10...		16	
Italy:				
Messina	Oct. 29-Nov. 4...		1	
Japan:				
Osaka and Hiogo	Nov. 12-Nov. 18...	1		
Tamsui, Formosa	Apr. 1-Aug. 31...	246		
Madagascar:				
Tamatave	Sept. 10-Sept. 16...			Smallpox reported.
Mexico:				
C. P. Diaz	Nov. 1-Dec. 10...	1	1	
Chihuahua	July 16-Dec. 9...		70	
City of Mexico	June 4-Nov. 19...	122	75	
Cuchio	Sept. 29...	25		
Monclova	Nov. 1-Dec. 10...	6	1	
Mulette	Sept. 29...	12		
Nuevo Laredo	July 1-Aug. 26...		3	
Ojenesa	Sept. 29...	50		
Pilares	do	15		
Progreso	Oct. 7-Dec. 10...	50		
Sabinas	Nov. 1-Dec. 10...	17	3	
San Antonio	Sept. 29...	20		
San Felipe	Oct. 7-Dec. 10...	122	18	
San Francisco	Sept. 29...	5		
San Juan	Oct. 7-Dec. 10...	107		
Suarez	Oct. 7...	40		
Tuxpam	Oct. 24-Oct. 30...		8	
Vado de Piedras	Sept. 29...	20		
Vera Cruz	Nov. 3-Dec. 7...		7	
Netherlands:				
Rotterdam	July 15-July 22...	1		
Ontario:				
Essex County	Oct. 30-Dec. 1...	118		
Kent County	Nov. 28-Dec. 1...	2		
Quebec:				
Kamouraska County	Aug. 21-Dec. 12...	215	0	
Russia:				
Khabarovsk	Apr. 1-Apr. 30...	1		
Moscow	May 27-Nov. 18...	119	59	
Odessa	June 10-Nov. 25...	59	16	
Riga	June 1-June 30...		22	
	Sept. 30...		11	
St. Petersburg	June 3-Nov. 18...	164	47	
Warsaw	June 3-Nov. 25...		56	
Scotland:				
Glasgow	June 3-June 17...	1	1	
Spain:				
Barcelona	Aug. 1-Aug. 31...		15	
Corunna	Nov. 19-Dec. 2...	4	3	
Valencia	Aug. 16-Sept. 15...	5	1	
Straits Settlements:				
Singapore	Apr. 1-Oct. 28...		95	
Turkey:				
Beirut	June 27-July 1...	1		
Constantinople	Oct. 31-Nov. 6...	1		
Erzeroum	July 8-Oct. 14...	21	1	
Smyrna	May 27-Oct. 15...		12	
Uruguay:				
Montevideo	May 27-Oct. 7...	4		

BARBADOS.

Quarantine information.

BARBADOS, November 27, 1899.

SIR: My last circular report was made on the 2d ultimo. I have now to report as follows:

Antigua.—Quarantine is in force there against Alexandria, Bombay, Calcutta, Hongkong, Mauritius, Oporto, Santos, and Paraguay for plague, and Bahia, Cuba, La Guayra, Manaos, Panama, Para, Puerto Cabello, Rio de Janeiro, and Valencia for yellow fever and smallpox.

Barbados.—On the 28th ultimo this colony declared Alexandria, Bombay, Calcutta, Hongkong, Mauritius, Oporto, Santos, and the State of Paraguay to be infected with bubonic plague, and on the 11th instant the quarantine against Panama was taken off.

Besides the above-mentioned places, quarantine is in force here against Bahia, Para, and Rio de Janeiro for yellow fever and smallpox. The health of the colony is exceedingly good.

British Guiana.—Quarantine is in force there against Brazil, Cuba, Haiti, and Panama, and arrivals from Portugal, Venezuela, and Calcutta are quarantined for examination by the health officer.

Dominica.—No report received.

Dutch Guiana.—Her Majesty's consul there on the 26th instant reported the health of the colony to be good, and that quarantine was not imposed on any vessel arriving there.

French Guiana.—Her Majesty's acting vice-consul there reports the health of that colony to be good.

Grenada.—Quarantine has been declared against Santos for plague. Quarantine is also in force there against Bahia, Colon, Para, and Rio de Janeiro.

Guadeloupe.—Quarantine is in force there against Egypt, India, Portugal, and Réunion for plague, and Buenos Ayres, Colon, and the southern States of America for yellow fever.

Jamaica.—Quarantine is in force there against Brazil, Cuba, Porto Rico, Venezuela, and the coast of Costa Rica and Panama between and inclusive of Points Carreta and Rincon. Vessels from Key West, India, Alexandria, Oporto, Grand Bassam, French Ivory Coast, and Mauritius are treated as "suspect," and dealt with by the board after considering the health officer's report.

Martinique.—Quarantine is in force there against Egypt, India, Portugal, and Réunion for plague, and against Brazil, Buenos Ayres, Colon, Mexico, and Southern States of America for yellow fever. Cuba "suspected."

Para.—Her Majesty's consul there on 1st ultimo wrote that the small-pox epidemic showed no signs of diminishing, and the mortality from yellow fever was still above the average.

St. Lucia.—Quarantine is in force there against Bahia, Panama, Para, Paraguay, Pernambuco, Rio de Janeiro, and Santos.

The reports forwarded by the chairman of the quarantine board give the following particulars:

Bahia.—For the fourteen days prior to November 13, 1 case smallpox.

Pernambuco.—For the fourteen days prior to October 17, clean bill of health.

Rio de Janeiro.—For the fourteen days prior to November 8, 9 deaths from yellow fever; 215 cases, 115 deaths from smallpox.

St. Thomas.—Quarantine is in force there against Bahia, Colon, Cuba, Key West, Panama, Para, Tampico, and Vera Cruz, for yellow fever, and against Alexandria, Bombay, Calcutta, Hongkong, Mauritius, Santos, and Paraguay for plague.

St. Vincent.—Quarantine is in force there against Bahia, Panama, Para, and Rio de Janeiro.

Trinidad.—Quarantine is not in force there against any place except Panama and Para.

Respectfully,

JAS. SANDERSON,
Clerk, Quarantine Board.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

BRAZIL.

Reports from Rio de Janeiro.

Plague at Santos.

RIO DE JANEIRO, November 16, 1899.

SIR: It seems that the plague at Santos is stationary. Since the 7th instant no new or suspected case has been sent to the isolation hospital. The last report, on November 9, was as follows: There existed 14 patients in the isolation hospital—11 from plague, 2 suspected, and 1 typhoid fever. Since then there has been no fatal case, 5 plague patients have recovered and have been discharged, and also the 2 suspected cases and the 1 case of typhoid fever. Therefore, at present, the total number of patients at the isolation hospital is 6, suffering from plague. All patients are in a reassuring state.

Plague at Sao Paulo.

In addition to the case already reported, there has occurred at Sao Paulo still another case of plague. The patient in this case is also a child, who, on November 10, was taken to the isolation hospital, where it died on the 11th. The places of residence of these 2 children attacked by plague are very distant from each other, and there has been no contact between them. The father of the deceased has not been at Santos, nor has he been in contact with persons arriving therefrom.

Plague and yellow fever on board of ships.

The administration of the Austrian Lloyd at Trieste announced that on board of the steamship *Berenice*, bound from Brazil to Europe, there occurred 3 deaths from plague. The steamship *Berenice* left Santos on October 18, arrived at the port of Rio de Janeiro, where it was under quarantine, and went to Europe. The entrance to the port of St. Vincent for taking coal was interdicted and the steamer was sent to a quarantine station.

On board of the steamship *Chili* of the Messagerie Maritime Company, bound here from Buenos Ayres in the second half of October, there occurred 2 deaths, one of a passenger and the other of a steward. The cause of the deaths was considered yellow fever.

The French steamship *Laplata*, of the same company, left Rio de Janeiro October 10, bound to Bordeaux. Among all on board, there has been good health. A lady, who took passage at Dakar, fell sick during the last part of the voyage and died at Bordeaux from yellow fever.

Quarantine.

The city and port of Lorenzo Marquez has been declared *infected*, and all the Portuguese ports of East Africa, from Delagoa up to Cape Delgado, of the Province of Mozambique, as *suspected*.

New sanitary regulations.

The new sanitary regulations, which were signed at Buenos Ayres on the 2d instant, by Dr. Hilde and the Brazilian secretary of legation and have gone into force and which are designed to regulate all traffic between Brazil and Argentina from November 15 to May 15, are as follows:

1. That from November 15 to May 15 of every year and until further notice, all vessels arriving here with passengers from the ports of Rio de Janeiro or Santos will be subject to the following:

2. Vessels carrying third-class passengers must not take steerage passengers in either of the two mentioned Brazilian ports unless they present a document from the shore authorities certifying that they have not been in contact with yellow-fever patients and are not attacked by yellow fever, and also that their clothes and luggage have been washed and disinfected previous to their embarkation.

3. Masters of vessels carrying first-class passengers will not receive others in Rio de Janeiro or Santos unless presented with a certificate, stating that bearer is not sick with yellow fever and certifies that their baggage has been disinfected previous to embarkation. Said certificate may be obtained from the family or nearest doctor.

4. The masters of passenger-carrying steamers must not allow any person on board (passenger or crew) to land in either Rio de Janeiro or Santos, and if this is impossible to insist on a medical certificate (similar to that of Rio de Janeiro or Santos passengers) when the person or persons return on board.

5. During the above-mentioned period (article 1) either an Argentine doctor or sanitary guard must travel on the passenger-carrying steamers from, or having called at, the mentioned ports. Said doctor or sanitary guard to make account of the steamer through the medium of the health board.

6. A sanitary commission, composed of an Argentine and a Brazilian doctor, will be established in the ports of Rio de Janeiro and Santos in order to certify to the doctor's certificates presented by passengers before boarding any steamer.

7. Under these conditions, all vessels arriving here from the two mentioned Brazilian ports will be granted free pratique in the roads after a disinfection of twenty-four hours, during which the disinfection of first-class passengers' luggage will be effected, and on condition that the vessel has employed six days from the hour of departure from Rio de Janeiro or Santos to the hour of visitation in the roads. In all cases, steerage passengers and their luggage, and suspicious cargoes (likely to carry contagion) will be landed at the Argentine quarantine station of Martin Garcia to undergo an eight days' quarantine, counting from the hour of departure from Rio de Janeiro or Santos.

This convention, since its publication, has met with opposition, both from a political standpoint in the press and from medical point of view by several physicians, who have made the convention the subject of a

discussion at the academy of medicine, where the question still continues to be discussed.

Respectfully,

W. HAVELBURG, M. D.,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Inspection service at Rio de Janeiro.

RIO DE JANEIRO, November 17, 1899.

SIR: I here proceed to answer the circular letter, dated September 20, received here on November 7.

From July 1, 1898, up to June 30, 1899, there left here 274 ships bound to ports of the United States. On board of those ships were conveyed 507 steerage passengers.

From July 1 up to the present date there have left 76 ships bound to ports of the United States, and they have conveyed 247 steerage passengers and immigrants.

The sanitary inspection of the ships and passengers has been effected in the following manner:

If the captain calls at the consulate, applying for the respective bill of health, inquiries and an examination of the crew list shows, whether on board there has occurred, during the respective period, any death among the crew.

Whenever a case of an infectious disease occurs aboard, the Brazilian authorities order the removal of the ship to the quarantine part of the port. (There is hardly ever any epidemic disease here except yellow fever.) The ship remains at that point for seven or ten days, is disinfected and also inspected by the authorities. When such a ship is about to leave this port, bound to the United States, I always go on board in order myself to inspect the crew before departure. In almost all cases I have been previously informed in regard to occurrences on board through my visits to the hospitals, and my connection with the agencies, captains, ship chandlers, etc.

Each ship that conveys passengers is inspected by me. In conformity with the immigration laws and regulations, August 16, 1898, a list has to be issued by the ship agency designating all the steerage passengers and for the last few months also such first-class passengers as are foreigners and intend to remain in the United States (immigrants).

If there is a physician on board I examine with him all persons whose names are on the list.

Then I deliver to the physician for each inspected person an inspection card, such as is prescribed by the quarantine laws and regulations, April 26, 1894, Article V, section 2; and if there is no physician on board, those cards are delivered to the captain.

On that occasion the baggage is also inspected. Up to the present there has been no occasion for me to object to the departure of any person on account of an infectious disease, and therefore to order the disinfection of the baggage of this and the other passengers; at the same time I give with the inspection card two red inspection cards, in conformity with Article V, section 10.

The favorable results, which has been observed during my time, of there being conveyed to the United States only persons in perfect health, is a consequence of the knowledge of the steamer agencies that they have to pay the expenses and the retransportation of the passen-

gers who do not conform to the immigration laws and regulations. Often doubtful persons are sent to the consulate before they can obtain a ticket.

Captain and physician sign in my presence the respective affidavits.

It has occurred twice, once on the 4th of last September in relation to the steamship *Herschel*, and again on the 27th of the same month in relation to the steamship *Swindon*, both bound to New Orleans, that a disinfection of the ship has been required in order to reduce the number of days of quarantine at New Orleans. For this purpose all occupied rooms on board have been thoroughly washed with soapsuds, to which creolin was added. The wearing apparel of the crew has been subjected for several hours to a spray of a carbolic solution; the bilge has been flushed with sea water, pumped out, and then disinfected with a strong solution of bichloride of mercury. The respective solutions have been washed down through the orifice leading from deck to the bilge. The deck has been abundantly washed with water.

To the cargo there has been done nothing.

In regard to vaccination I may remark the following: As we have here, especially during recent months, a smallpox epidemic, almost all the captains have been requested to be vaccinated and to cause their crews to be vaccinated also. Not a single one has consented to follow the advice. To the execution of the measure there are many difficulties, such as want of time, refusal of the crew, expenses, etc.

There is no means of compelling them, as no legal compulsion exists.

In regard to the passengers, the agents of the steamers call their attention, when they apply for a ticket, to the utility of vaccination. Few persons, that have not been vaccinated before, follow the advice. On board of steamers that convey physicians, passengers are examined in order to ascertain whether they have been previously vaccinated and eventually the physician vaccinates during the voyage. For that purpose I have here repeatedly applied for vaccine tubes from the Municipal Vaccine Institute.

In my opinion, about 95 per cent of steerage passengers leaving this port for the United States have been vaccinated.

Respectfully,

W. HAVELBURG, M. D.,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

CHINA.

Reports from Hongkong.

HONGKONG, November 3, 1899.

SIR: I have the honor to transmit herewith my report of transactions at this station for the week ended October 28, 1899, and to respectfully inform you that during the past two weeks there have been only 2 cases of plague, and that the city remains free from other quarantinable diseases. The last case of bubonic fever occurred eleven days ago, and the city has been officially declared free from the recent epidemic. The quarantine against Hongkong at Singapore and other cities in the east has been removed.

Respectfully,

J. C. PERRY,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

[Inclosure.]

Report of vessels inspected at Hongkong, China, for week ended October 28, 1899.

Date.	Name of vessel.	Destination.	Number of crew.	Number of cabin passengers.	Number of steerage passengers.	Number rejected.
Oct. 24	Br. ss. Choysang.....	Manila, P. I.....	70	2	16	1
Oct. 25	Br. ss. On Sang (a).....	San Francisco, Cal..	53	0	0	1
Do.....	Sp. ss. Legozpi.....	Manila, P. I.....	40	0	0	0
Oct. 26	Br. ss. Breconshire.....	Tacoma, Wash.....	53	0	12	0
Oct. 27	Br. ss. Argyle (b).....	New York, N. Y.....	37	0	0	1
Do.....	Jap. ss. Yevata Maru (b).....	Manila, P. I.....				
Do.....	U. S. st. Salvadora.....	do.....	50	0	34	0
Do.....	Br. ss. Diamante.....	do.....	82	10	25	2

a Crew bathed and their clothing disinfected.
 b Supplemental bill of health.

HONGKONG, November 6, 1899.

SIR: I have the honor to transmit herewith report of transactions at this station for the week ended November 4, 1899.

Respectfully,

J. C. PERRY,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

[Inclosure.]

Report of vessels inspected at Hongkong, China, for week ended November 4, 1899.

Date.	Name of vessel.	Destination.	Number of crew.	Number of cabin passengers.	Number of steerage passengers.	Number rejected.
Oct. 31	U. S. ship Josephus.....	New York, N. Y.....	17	2	0	0
Nov. 1	Br. ss. Tzinan.....	Manila, P. I.....	88	25	33	1
Do.....	Br. ss. Sung Kiang.....	do.....	65	23	43	1
Do.....	U. S. ship Manuel Liguana(a)	New York, N. Y.....				
Nov. 2	U. S. st. launch Worthington.	Manila, P. I.....	10	0	0	0
Do.....	U. S. st. launch Sternberg...	do.....	10	0	0	0
Do.....	Argentine ss. Presidente Sermente (b).	do.....	335	0	0	0
Nov. 4	U. S. ss. Venus.....	do.....	49	2	3	0
Do.....	Br. ss. Coptic (c).....	San Francisco, Cal.	128	29	506	8

a Supplemental bill of health.

b Argentine naval vessel.

c Crew and steerage passengers bathed and their baggage disinfected.

Report showing number of deaths occurring in Hongkong during the month of September, 1899, and their causes.

I.—GENERAL DISEASES.

(A) Specific febrile diseases.

Zymotic—

Whooping cough.....	1
Fever, typhoid (enteric).....	3
Fever, simple, continued.....	1
Diarrhea.....	32
Dysentery.....	8
Bubonic fever (plague).....	58

Malarial—	
Fever, intermittent.....	5
Fever, remittent.....	20
Fever (undefined).....	22
Beriberi.....	17

Septic—	
Septicæmia.....	4
Puerperal fever.....	1

(B) *Diseases dependent on specific external agents.*

Effect of injuries—	
Burns.....	2
Drowning.....	4
Suffocation by landslip.....	1
Rupture of spleen.....	2
Fracture of skull.....	1
Wound of thigh.....	1
Cut throat (suicide).....	1
Dislocation of neck from fall.....	1
Gangrene of arm.....	1
Errors of diet—	
Alcoholism.....	1

(C) *Developmental diseases.*

Immaturity at birth.....	6
Debility.....	7
Old age.....	4
Marasmus and atrophy.....	18
Inanition.....	3

(D) *Miscellaneous diseases.*

Rheumatism.....	1
Cancer of uterus.....	1
Cancer of larynx.....	1
General tuberculosis.....	2

II.—LOCAL DISEASES.

(A) *The nervous system.*

Meningitis.....	2
Apoplexy.....	4
Paralysis.....	2
Paralysis, paraplegia.....	3
Infantile convulsions.....	25
Tetanus.....	2
Trismus.....	71
Hydrocephalus.....	1
Tumor of brain.....	1
Senile dementia.....	2

(B) *The circulatory system.*

Heart disease.....	12
Aneurism.....	1

(C) *The respiratory system.*

Bronchitis.....	22
Pneumonia.....	5
Phthisis.....	61
Pleurisy.....	2
Broncho-pneumonia.....	1

	(D) <i>The digestive system.</i>	
Icterus.....	.....	1
	(E) <i>The urinary system.</i>	
Bright's disease.....	.....	1
	(H) <i>Affections connected with parturition.</i>	
Childbirth .....	.....	1
	(I) <i>The skin.</i>	
Boils .....	.....	4
	(J) <i>Diseases of organs of locomotion.</i>	
Hip-joint disease .....	.....	1
III.—UNDEFINED.		
Dropsy.....	.....	4
Undiagnosed .....	.....	14
Total.....	.....	473

Death rate per 1,000 per annum for September, 1899, 22.2.

COLOMBIA.

Description of the country around Bocas del Toro from a sanitary point of view—Fruit plantations.

MOBILE, ALA., December 8, 1899.

SIR: I have the honor herewith to submit to the Bureau the results of the observations made during a trip around the Chiriqui Lagoon after the close of the quarantine season of 1899. Transmitted under separate cover is a chart of the lagoon and vicinity, on which I have attempted to locate the various settlements and plantations with which ships engaged in the fruit trade have communication.

The Chiriqui Lagoon is described as being 32 miles long, from east to west, 12 miles wide in the center, 5 at its eastern, and 10 at its western extremity, and is capable of receiving, in security, vessels of heavy draught. The entrance between Bluefield Point and Water Cay is 3½ miles wide, being open north and south.

I visited all the large plantations of the United Fruit Company, starting at Monkey Cay on the western shore, going as far down as Cricamola River. The shores of the lagoon for the greater part, all around, are low and swampy for a distance of one to two miles inland. The plantations are situated behind the swamp, in the valleys of the numerous rivers and creeks which enter the lagoon, and access is had to them either by boats up the streams, or by narrow-gauge railroads, which have been built through the swamp. So numerous are these plantations that I should estimate the population in the lagoon proper at about 5,000. On the larger estates, especially those of the United Fruit Company, commodious buildings have been erected for the accommodation of employees and laborers.

The meteorological conditions are peculiar, owing to the influence of the northeast trade winds and the high cordillera in the background; the amount of rainfall is something enormous, there being practically no dry season; electrical disturbances are rare; wind squalls are frequent, hurricanes never occur; the average barometric pressure is 29.50 inches, and the temperature varies between 75° and 90° F.

Hospital of the United Fruit Company.

On Monkey Cay, a small island in the northwestern corner of the lagoon, is located the hospital of the United Fruit Company. It is an admirable location, high and dry, and exposed to the winds from all directions; the building itself picturesquely situated in a beautiful cocoanut grove. The hospital, as yet in its incipiency, is well appointed, and in charge of a competent physician. Since its establishment last August up to the time of my visit, there had been treated 20 patients with 2 deaths. All the cases were typical malarial fever in its various forms, and the deaths were due chiefly to neglect before treatment was sought. This hospital is for the benefit of the many white employees of the company, most of whom are foreigners.

The western shore of the lagoon is largely under cultivation, many plantations lying in the numerous fertile valleys among the foothills. In visiting the more important, I took occasion to look into all cases of sickness that I could find, with the same result everywhere, malarial fever, chiefly of the tertian variety, being the only prevailing disease. Nowhere could I hear of the previous existence of any such infectious diseases as measles, whooping cough, scarlet fever, or the like. While occasionally seen, enteric troubles are rare. In this part of the lagoon Robalo River seems to be the most unhealthy point, the houses being built almost in the swamp. During the past summer cases of severe forms of malaria occurred here, among foreigners.

I found it impossible to form any idea of the death rate among the population of the lagoon, no records being kept. Many negroes die from neglect; but little notice is taken when one dies, and the bodies are buried in the bush. Among the foreigners and others of some means, the habit is to take the very sick to Bocas del Toro, and then in the event of the death it swells the death rate at that place. In considering sanitary conditions here, it is difficult to arrive at the true value of actual climatic and local influences, as the abuse of alcohol plays so large a part in the production of disease, and in many cases of fatal outcome the previous history of drinking can not be disregarded as a factor.

Chiriqui Valley and village.

By far the most important district in the lagoon is the Chiriqui Valley, between Fish Creek and Man Creek, at which points great spurs from the cordillera come down to the water's edge, and through which runs the Guaroma River. In this valley and along this river are located the largest estates of the United Fruit Company, better known as the Chiriquicito and Eureka plantations, which extend over thousands of acres and which employ several hundred men. The sanitary conditions of this region can not be called good. Lying in a low valley, shut in by the hills, and subject to a heavy rainfall the year round, paludal fevers of severe form, often complicated with dysentery are always prevalent. The foreigners residing here especially suffer, although deaths among them are rare. The work on these plantations is arduous in the extreme, and it is remarkable how well the men, both white and black, stand it. Every nerve is strained to get the fruit out in time for the steamer, promptly, quickly, and neither rain, storm, nor sickness must deter it. Under the management of the United Fruit Company the health of these people will be materially bettered, as everything is being done to provide suitable buildings for the proper

housing of employee and laborer, and to provide them with an abundance of good food.

On the shore line of this valley as it opens out on the lagoon, is situated the village of Chiriqui Grande. This village lies at the foot of a range of hills, which rise to a height of several hundred feet, on a narrow strip of sandy beach, which was probably formed by the washing down, by the heavy rains, of silt from the hillside. The houses, mostly light frame structures, are strung out in two rows forming a single street, one row built on piling over the water, the other row along the foot of the hill. I estimate the population at between 500 and 600, chiefly Chiriquanos, a mixed race of Spanish and Indian, who came originally from the high plateaux in the interior. There are few Jamaicans, some Chinamen, and a few foreigners, the latter mixing and amalgamating with the Chiriquans. From here a trail, very hard to travel, leads to the cordillera, over the divide to the port David on the Pacific coast.

Sanitary conditions are not the best in Chiriqui Grande. Open to the east it receives the sea breeze, but becomes fearfully hot when other winds prevail. No regard is paid to hygiene, public or private. Refuse and offal are thrown everywhere, and what goes into the sea is washed back by each flood tide, there being no current to carry it off. Strange to say, no rain water is collected for drinking purposes, as is done everywhere else. The principal water supply is a spring on the hillside, which collects in a small pool walled in by a few rocks, and no care is taken to protect it from pollution. One or two little creeks run out along the base of the hills, but they are rendered brackish by the tide, and are used for bathing and the washing of clothes. The tide backing in keeps these sinkholes, for such they are, in a filthy condition. Malarial fever is very common here, and at certain seasons, July and December, of quite a severe type. In the fall of 1897, 36 deaths took place in six weeks, as I learned from a reliable source. This is the nearest approach to an epidemic around here that has come to my knowledge, and I am inclined to think that it was yellow fever. Everything is propitious for the spread of any infection that might be brought in. During the past summer several cases of pneumonia originated here.

I describe this place particularly, as it promises to become a place of some importance. It is not, however, a port of entry. There is considerable passenger traffic between this place and Bocas del Toro by means of naphtha and steam launches. The United Fruit Company will soon make this the outlet of the large plantations, and has now under construction a pier extending 1,000 feet into the lagoon. In another year the question will arise if, during quarantine season, ships will be allowed to moor alongside this dock to take on cargo.

East of the Chiriqui Valley as far as the Cricamola River all the valleys are covered with plantations, and high up the valley of the Biarri River a new region is being exploited. Sanitary conditions at all these places are about the same. Up the Cricamola River, the largest stream entering the lagoon, about 10 miles from the coast, are again found large estates of the United Fruit Company. Among the laborers on these plantations are seen many Chiriqui Indians, who come down from the mountains in the interior, and I found them very susceptible to the fevers of the coast, though here again the abuse of alcohol must be taken into consideration. The Cricamola Valley is subject to frequent inundations from sudden freshets, which may account for the continual prevalence of malarial fever.

Eastern Shore of the Lagoon.

The eastern shore of the lagoon, from the Cricamola River to Bluefield Point is sparsely populated, and only a few small plantations are located on this coast.

Referring to communication with the outside world, and the chances of infection being brought into the lagoon, I must say that there is nothing to prevent smaller vessels coming from any point to any part of the lagoon. It is not infrequent that cargoes are smuggled into the numerous creeks and streams, and quarantine laws have been evaded in this way. Quite recently a canoe landed at Bluefield Point, bringing passengers direct from Panama. I merely mention this as an instance of how it can be done.

Reference to the chart will show the course of the steamers of the United Fruit Company, and the points of anchorage where fruit is loaded. Other steamers stop at many of the creeks wherever fruit may be awaiting them. Anchorage is usually from one quarter to 1 mile off-shore.

Numerous plantations and settlements lie along the shores of Almirante Bay and on the many adjacent islands. The fruit from all these places is collected in lighters and brought to the anchorage before the town of del Toro, where it is loaded on the steamers. The population in this region numbers about 1,500, exclusive of the town of Bocas del Toro with its population of about 2,500. The situation of the islands and the shores of Almirante Bay seems to have some favorable influence on the health conditions, as the people here suffer less from malarial fever than those in the lagoon. The sea breeze may account for this to some extent, and the rainfall is considerably less.

On the western shore of the bay new lands are being opened, and a road is being pushed through the swamp to reach the valley of the Changuinola River, a large stream emptying into the sea on the coast above Columbus Island. This will open up immense tracts of virgin land which, in time, will rival the Chiriqui Valley.

Hoping that the above will give some idea of the topography, climate, and sanitary conditions of the country around Bocas del Toro, and serve for future guidance in quarantine matters, I respectfully submit it.

Respectfully,

HERMAN B. MOHR, M. D.,

Late Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

CUBA.

Report from Cienfuegos, Casilda, and Santa Cruz del Sur.

CIENFUEGOS, CUBA, December 11, 1899.

SIR: I have the honor to report that during the week ended December 9, 27 deaths have occurred in this city, 3 from malaria, 6 from intestinal diseases, and 4 from tuberculosis. No contagious diseases reported. Death rate for the week is 35.19. During the week six foreign vessels have been inspected upon arrival and seven previous to departure.

Casilda.—Dr. Alejandro Cantero reports 11 deaths during the week in Trinidad, 1 from malaria, 1 from intestinal diseases, and 3 from tuberculosis. No contagious diseases reported. Inspected five vessels during the week.

Santa Cruz del Sur.—Dr. Juan R. Xiques reports 2 deaths during the week. No contagious diseases. Inspected 11 vessels during the week.

Respectfully,

J. M. LINDSLEY,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Inspection of coastwise vessels at Cienfuegos.

CIENFUEGOS, CUBA, *December 13, 1899.*

SIR: I have the honor to report that in accordance with recommendations made by Asst. Surg. S. B. Grubbs, U. S. M. H. S., the following schedule for the inspection of coastwise vessels has been made:

Steamships Manzanillo and Sancti Spiritus.—Inspected at Santa Cruz, Wednesday, 11 a. m., on outgoing trip. Inspected at Casilda, Monday, 3 p. m., on return trip.

Steamship Independiente.—Inspected at Casilda, Monday, 6 a. m., on outgoing trip. Inspected at Cienfuegos, Friday, 1 p. m., on return trip.

Steamships Antinogenes and Reina de los Angeles.—Inspected at Cienfuegos, Friday, 11 a. m., on outgoing trip. Inspected at Santa Cruz, Friday, 10 a. m., on return trip.

Steamship Josefa.—Inspected at Cienfuegos, Monday, 11 a. m., on outgoing trip. Inspected at Casilda, Wednesday, 8 a. m., on return trip.

Respectfully,

J. M. LINDSLEY,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Report on Mariel Quarantine Station, near Havana, Cuba.

HAVANA, CUBA, *December 5, 1899.*

SIR: Mariel is situated about 21 miles west of Havana, on the northern coast of the island of Cuba. It has an excellent harbor, reached by a narrow channel having a depth of not less than 5 fathoms, thus permitting the passage of the largest vessels. The channel is at present partly closed by the wreck of the Spanish steamer *Alfonso XII*, but there is a clear space of nearly 200 feet between the wreck and the opposite headland.

The town of Mariel has a population of about 3,000, and is situated about 2 miles from the entrance to the harbor.

The quarantine station occupies a point immediately within the entrance to the harbor. This is known as Regla Point, and is surrounded on two sides by water, and cut off from the adjacent country by a stone wall about 9 feet high, extending from sea to sea, a distance of about 1,150 feet. The inclosure is triangular in shape, and the ground is flat and moderately elevated above the level of the sea. Beyond the wall the ground rises in gentle slopes to the surrounding hills.

The reservation as above described is divided into two unequal parts by a stone wall about 5 feet high, immediately adjoining which is a disinfecting house—the smaller portion of the reservation being considered as the "infected" part, and the larger as the "noninfected" part.

The situation of Mariel is admirably adapted for a quarantine station

not only for Havana, but also for other ports on the northern coast of Cuba, and the buildings, as indicated in the plan submitted herewith, are all in a fair state of repair. It has been demonstrated in the case of the steamer *Buenos Aires* that in its present condition it is capable of being utilized for the detention of vessels, or their crews and passengers who may have been exposed to a quarantinable disease. The buildings are spacious, well constructed, well ventilated, and in every way adapted to the purpose for which they were intended, and will accommodate about 1,500 persons. The plan submitted with this report, as well as the copy of report made to me by Act. Asst. Surg. E. F. McConnell, United States Marine-Hospital Service, attached herewith, indicate the dimensions of the various buildings, and also their condition.

It will be seen from the above short description of the reservation that it is capable of being easily guarded, so that the escape of detained persons, or communication with the town of Mariel or with the outlying country, can be made next to impossible. This has been clearly demonstrated in the case of the passengers of the steamship *Buenos Aires*, several of whom openly threatened to make their escape, but not one of whom succeeded in doing so.

Under any conditions, and especially at present, in view of the prevalence of the bubonic plague in Europe and South America, I am of the opinion that the quarantine station at Mariel is indispensable for the proper quarantining and disinfection of infected vessels, their crews and passengers. The detention and disinfection of infected vessels inside a closed and busy harbor like Havana, is certainly not in line with modern quarantine methods, and I would therefore suggest that it be done away with, now that the opportunity presents itself of acquiring a station in every way so well adapted as Mariel; and I would recommend that the station at Mariel be at once developed, and put in first-class condition for all kinds of quarantine work, for the port of Havana as well as for adjacent ports.

Below I beg to submit a succinct statement of the work necessary to be done in order to carry out the views expressed above:

- (1) The present wharf to be extended about 100 feet, so as to obtain a depth of water at the pier head of 30 feet.
- (2) The pier head to be made sufficiently large to accommodate the necessary disinfecting plant for the disinfection of vessels.

NOTE.—The carrying out of the above recommendation would entail considerable expense, and should this prevent its being adopted I would suggest as a temporary expedient that a floating disinfecting plant, more or less on the lines of the barge *Protector* be stationed at Mariel, in connection with the quarantine station.

- (3) Quarters building "c" to be divided into small compartments of about 10 by 10 feet, for the accommodation of first-cabin passengers. This will give ample accommodation for about 80 passengers of this class, or with a little crowding 100 may be accommodated.

- (4) Quarters buildings "f" and "h" to be fitted up with two double tiers of bunks, one on either side, and running the whole length of the buildings. The framework of these bunks to be made of iron stanchions fixed to the floor and securely braced together, and pieces of canvas sufficiently large for the accommodation of one person, to be laced to the frames. In case of necessity a third row of "standees" could be erected in the center of the buildings, thus considerably increasing their capacity.

- (5) The erection of a pumping station, with two large cisterns placed at a height of 30 feet above the ground, one to be used for fresh and the

other for salt water, and pipes to be laid from these cisterns to all the buildings on the reservation.

(6) The erection of an evaporating plant. This is a necessity, inasmuch as the cistern supply of fresh water is at times apt to run short.

(7) The construction of suitable medical officers' quarters, with accommodation for two medical officers.

(8) All the buildings on the reservation to be whitewashed.

(9) The erection of a suitable flagstaff.

Should the above recommendations meet with the approval of the Bureau, I would respectfully ask that authority be given at once to commence the work of a less expensive nature, and in the meantime to make out specifications and obtain bids for the rest of the work. I consider it important that we should keep improving the place, so as to show that we have not abandoned the station.

In a conversation which I had with Governor-General Brook, he assured me that the station was turned over to the Service unconditionally, to be used for quarantine purposes so long as the Service thought fit.

Respectfully,

G. M. GUITÉRAS.

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Description of the buildings on the Mariel quarantine.

MARIEL, CUBA, November 27, 1899.

SIR: In compliance with your verbal order of 21st instant, I have the honor to make the following report upon the quarantine buildings and grounds located at this port:

This station is situated upon a spur of land just inside the entrance of the harbor, and is triangular in shape, the two sides being bounded by water, and the base by a stone wall from eight to nine feet in height, and is divided by a smaller wall about five feet in height.

The buildings number eighteen, and consist of four houses to be used as quarters for quarantined persons, three kitchen buildings, three water-closet buildings, a chapel, a morgue, a disinfecting house, medical officers' quarters, three washhouses, and a small wooden outbuilding.

(a) *Medical officers' quarters.*—This building is situated in the apex of the triangle, and is made of stone covered with plaster. It consists of four bedrooms, a kitchen, a cistern, a small storeroom, and a water-closet. In the center of the building is a large room, 34 feet 4 inches by 22 feet 5 inches, the floor of which is of red tile, and is in fairly good condition. The floors of the other rooms are of wood, and are also in good condition. The entire building is in excellent condition, with the exception of a few feet of the front veranda which require renewal with tiles. The water closet is particularly unsanitary, being located next to the cistern, and is of the ordinary privy-vault type.

(b) Next to this building is a washhouse, of stone and mortar with tiled roof, containing a large stone tub, and furnace for heating the water. This building requires no repairs.

(c) *Quarters No. 1.*—This is a wooden building containing five rooms, each 26 feet 2 inches in width, their respective lengths being 93 feet 5 inches, 65 feet 10 inches, 91 feet 10 inches, 39 feet 10 inches, and 25 feet. The floors of this building are of wood, and are in excellent repair.

The roof is of tiles, and requires not more than 100 new ones to put it in thorough repair. On the west side of this building is a cistern, made of stone and cement, 70 feet long by 20 feet wide, by 5 feet deep.

(d) Located behind quarters No. 1 is a kitchen building and quarters for the employees, consisting of a kitchen and nine small rooms, with stone floors and tiled roof. No repairs are needed to this house.

(e) *Water-closet building No. 1* is of stone and mortar, with tiled roof, containing eight water-closets with a stone and cement vault underneath. This building does not require any repairs.

(f) *Quarters No. 2* is a large wooden building, containing on the south end a large storeroom 25 feet 8 inches by 15 feet 3 inches. The building has one large room 180 feet 4 inches by 47 feet 3 inches. The roof is of tiles, and is in excellent condition, requiring not more than 50 to 80 tiles to completely repair it.

(g) *The chapel* is situated behind quarters No. 2, and is a small wooden building 20 feet 11 inches by 12 feet 8 inches, requiring no repairs.

(h) *Quarters No. 3* is situated to the west of quarters No. 2, and is a wooden building with tiled roof, containing on the south five small rooms 12 feet 10 inches by 9 feet 10 inches each, two small storerooms, one large room 32 feet 10 inches by 26 feet, and two other storerooms. The southeast corner of the veranda of this building requires repairing for some 15 feet. The roof over the large room above mentioned also requires repairing with new tiles, for which not more than 100, I think, will be needed. Otherwise, the building generally is in fair condition. Attached to this building is a cistern, 20 feet 4 inches by 7 feet 3 inches by 5 feet deep, of the same pattern as that attached to quarters No. 1.

(i) *Kitchen No. 2* is located behind the above building, and is of stone and mortar with tiled roof, consisting of three rooms, respectively, 13 feet by 24 feet 5 inches; 24 feet 9 inches by 24 feet 4 inches, and 24 feet 4 inches by 13 feet 3 inches. The floors of this building are of stone. Considerable repairs are needed to the furnace, otherwise the building is in fairly good repair.

(j) *Water-closet No. 2* is directly in the rear of kitchen No. 2, and is of stone and mortar of the same type as water-closet No. 1. It contains four water-closets, and does not require any repairs.

(k) *Washhouse No. 2* is situated between quarters Nos. 2 and 3, directly on the southern water front. It is of the same type as washhouse No. 1, and is in excellent repair.

(l) *The disinfecting house* lies to the west of quarters No. 3, and 50 feet from the water. This building is of stone and mortar, and contains three rooms, with steam chamber and boiler of the Geneste Herscher type. The building itself needs no repairs. The connections of the steam chamber and boiler have all been removed, rendering the machine useless for the time being.

(yy) In juxtaposition is a stone wall 907 feet long and 5 feet high, which divides the ground. It is generally in good repair, and requires, perhaps, not more than 30 feet renewal.

(m) *Quarters No. 4* is placed beyond this wall to the west. This building is said to have been used as an isolation hospital, and is of wood with tiled roof. It is 92 feet long by 26 feet 7 inches in width, and contains three large rooms and five storerooms. The building is not in particularly good repair. The foundation in several places is in bad condition, and the veranda, especially on the northwest corner, is in need of renewing.

Attached to this building is a *cistern* of the same type and about the same dimensions as those already mentioned.

(n) Behind quarters no. 4 is *kitchen building No. 3*, containing four rooms and a kitchen, made of stone and mortar with tiled roof. No repairs are needed, except to the stone floor in the front room.

(o) Immediately in the rear of this building is a wooden building 71 feet 9 inches long and 26 feet 1 inch wide, divided into five rooms, two of which have tiled floors. The roof is of tin, and requires extensive repairs. This house was probably used as a morgue.

(p) To the west of kitchen No. 3 and the foregoing building is *water-closet no. 4*. It is of the same type as the others, and is in very bad repair, so that it can not now be used.

(q) *Washhouse No. 3* is situated on the water front and immediately to the west of quarters no. 4. It is of the same pattern as the other washhouses, and needs no repairs.

In the open space near the southwest corner of the triangle is a small wooden outbuilding in bad repair.

(r) Running across the base of the triangle is a large stone wall 1,150 feet long and ranging from 8 to 9 feet in height, about 72 feet of which needs complete renewal.

(zz) Within about fifteen days the Service has erected in quarters Nos. 1, 2, and 3, 548 beds, made of the wooden standee pattern, and covered with canvas, and has also repaired the kitchens so that they could be properly used to meet the needs of the quarantined passengers of the steamship *Buenos Aires*. A wooden water-closet has also been erected on the northeast water side, directly over the water, and a similar one on the southern water side, directly over the water.

I would respectfully beg to call attention to the fact that this station has no protection whatever from fire, also that the privy system is not sanitary, and that the cisterns are inadequate to supply the wants of a large number of people with the necessary water, if quarantined for a length of time.

The entrance to the harbor is marked by three buoys, and 6 fathoms of water can be carried from the bar to the anchorage.

I omitted to mention that directly opposite to quarters No. 2 is a wharf, 97 feet by 29 feet, in excellent repair. The depth of water immediately alongside this wharf is 2 fathoms. In front of quarters No. 4 there is a smaller wharf, 65 feet by 16 feet 6 inches, which is in very bad repair.

I am of opinion that at least 800 people can be comfortably quartered at this station.

Respectfully,

E. F. McCONNELL,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Report from Havana.

HAVANA, CUBA, December 12, 1899.

SIR: I beg to submit the following sanitary report for the week ended December 9, 1899:

During the week 10 cases of yellow fever were reported, and 2 deaths, being a slight increase over the week previous. On December 9 11 cases were under treatment.

The total deaths from all causes reported during the week was 105,

and, estimating the population of Havana at 220,000, this would show a mortality rate of 24.81 per thousand. The weather has been warm and dry.

On the 8th instant a telegram was received from Dr. Souchon, president of the Louisiana State board of health, stating that all quarantine restrictions were removed for the port of New Orleans, and that disinfection of baggage for that port was no longer required; disinfection was therefore discontinued from that date for vessels or passengers bound for New Orleans.

On the 8th instant, this office was informed that a case of smallpox was undergoing treatment at the Mercedes Hospital, the patient, it was alleged, having arrived by the steamer *La Navarre*, and having been taken immediately to the hospital. On investigation, it was found that the diagnosis was correct, and that the man had arrived by the steamer *La Navarre* on December 4 as stated, but without complaining of any symptoms, other than a slight headache, and a temperature of 37.5° C. He was subsequently treated by a local physician for la grippe, and on the afternoon of the 6th instant was advised to go to the hospital, where the case was first diagnosed as measles; but on the succeeding day the papular eruption became more distinct, some vesicles also being observed, and the case was then pronounced to be one of smallpox. Under these circumstances, I do not think that any blame attaches to the boarding officer.

In view of the fact, however, that this case got through, and keeping in mind the possibility of the introduction of bubonic plague, I have determined to make the inspection of passengers from foreign ports more rigorous, and have adopted the plan indicated in the accompanying copy of letter addressed to the officer in charge of the outdoor department.

I have the honor to submit herewith the usual mortality table for the period covered by this report, and also report of work done by the barge *Protector* during the week ended December 9, 1899.

Respectfully,

G. M. GUITÉRAS,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

[Inclosure No. 1.]

Mortality table for Havana for week ended December 9, 1899.

Diseases—	Deaths.
Tuberculosis	26
Pneumonia.....	6
Enteritis.....	7
Yellow fever	2
Malarial.....	3
Pernicious	1
Total deaths, all causes.....	105

[Inclosure No. 2.]

Report of baggage disinfected by the barge Protector at Havana for the week ended December 9, 1899.

Date.	Name of steamer.	Sailed from.	Destination.	Trunks.	Baggage.		
					Valises.	Parcels.	Total.
Dec. 4...	Olivette.....	Havana...	Tampa.....	31	11	5	47
Dec. 6...	Mascotte.....	do.....	do.....	39	23	2	64
Dec. 7...	Whitney.....	do.....	New Orleans..	5	4	1	10
Dec. 9...	Olivette.....	do.....	Tampa.....	58	50	8	116
Total.....				133	88	16	237

I certify that the above report is correct.

Respectfully,

G. M. GUITÉRAS,

Passed Assistant Surgeon, U. S. M. H. S.

[Inclosure No. 3.]

HAVANA, CUBA, December 9, 1899.

SIR: In view of the fact of the passing of a case of smallpox by the medical officers, on board the French steamer *La Navarre*, and bearing in mind that a case of bubonic plague might in the same way have got through, I have to inform you that the following plan will be adopted hereafter in the case of vessels carrying a large number of passengers coming from infected localities:

1. The inspection of such vessels to be made by one or both of the boarding officers, and yourself.

2. One of the boarding officers to remain on board the vessel after the inspection until the steamer is docked, or, if anchored in the bay until all the passengers have disembarked.

3. A second inspection to be made at the time the passengers are leaving the vessel, and the steamer and crew to be thoroughly inspected after the landing of the passengers.

I have again to impress upon you and the boarding officers, that great care must be exercised in the inspection of such vessels.

Respectfully,

G. M. GUITÉRAS,

Passed Assistant Surgeon, U. S. M. H. S.

Act. Asst. Surg. E. F. McCONNELL,

*U. S. Marine-Hospital Service, Havana, Cuba.**Cases of yellow fever on transport Kilpatrick at Havana.*

HAVANA, December 22, 1899.

WYMAN, Washington, D. C.: Case of yellow fever on transport *Kilpatrick*. Vessel disinfected and sent Mariel to serve quarantine detention.—GUITÉRAS.

Concerning the work of the Protector at Havana.

PHILADELPHIA, December 12, 1899.

SIR: Referring to conversation with the writer regarding the *Protector*, we note that we have late inquiries regarding the vessel from Dr. A. J. Martin, inspector-general des S. sanitaires, Paris, France, through L. Derrecagaix, director of health at Havre, and as this letter is interesting, we inclose a copy.

We have also written to parties in Portugal, Chili, Brazil, and Colombia regarding the *Protector*, which seems from its service in Havana Harbor to have attracted great attention to the valuable work of your Bureau.

Respectfully,

KENSINGTON ENGINE WORKS, LIMITED,

W. H. FRANCIS,

Secretary and Treasurer.

[Inclosure.]

HAYRE, September 25, 1899.

I have been intrusted by Dr. A. J. Martin, general inspector of the sanitary service in Paris, to get some information concerning the *Protector*, whose reputation came here from Havana Harbor.

I would be very much obliged if you could send a prospectus to the above-mentioned doctor, who could call the attention of our Government to the necessity of having a similar engine.

The name of the plague, which hangs over Europe, would also give good impulse toward sanitary improvements. Then, I hope you will write the details which shall be received with thankfulness.

Respectfully,

L. DERRECAIGAIX,
The Director of Health.

MESSIEURS LES ADMINISTRATEURS DU THE KENSINGTON ENGINE WORKS.

Reports from Matanzas, Cardenas, and Isabela de Sagua.

MATANZAS, CUBA, December 13, 1899.

SIR: I have the honor to submit the following sanitary report of the quarantine district under my command for the week ended December 9, 1899:

Matanzas.—Twenty-five deaths occurred in the city of Matanzas during the period covered by this report, showing a mortality of 32.64 per thousand. The principal causes of deaths were as follows: Malarial fever, 7; enteritis, 5; infantile tetanus, 3; tuberculosis, 2; heart disease, 2; other causes, 6. The following case of an infectious character was reported: Diphtheria, 1. Seven vessels were inspected on arrival; 6 of these were foreign and 1 a coasting vessel. Six bills of health were issued to foreign vessels and 1 certificate of inspection to a coasting vessel. Nineteen health certificates were issued, 5 to persons leaving the island via Havana. Twelve pieces of baggage were disinfected and 10 were inspected and passed.

Cardenas.—Act. Asst. Surg. Enrique Saez reports 18 deaths in Cardenas during the week, all from general diseases. No cases of a particularly infectious or contagious character were reported. Four vessels were inspected on arrival; 3 of these were foreign and 1 was a coasting vessel. Two bills of health were issued to foreign vessels.

Isabela de Sagua.—Act. Asst. Surg. Pedro Garcia Riera reports 2 foreign vessels were inspected on arrival, 1 bill of health issued to foreign vessel.

Caibarien.—Reports not received in time.

Respectfully,

FELIX GARCIA,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine Hospital Service.

Report from Nuevitas.

NUEVITAS, CUBA, December 10, 1899.

SIR: I have the honor to submit the following report for the week ended December 9, 1899:

Eight vessels have arrived and 8 bills of health have been issued. The mortality during this week has increased considerably, but it is among old people that the deaths have been more numerous, and the diseases are not infectious ones. One Spaniard and 3 Americans have been detained at Cayo Puto during three days to complete five from their departure from Havana. Rain has been very frequent dur-

ing this week and the weather cool, but very damp. After so long a drought as had been prevailing over this region, these excessive rains are causing much harm in health and wealth.

Respectfully,

OWEN W. STONE,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

[Inclosure.]

Mortality report of Nuevitas for the week ended December 9, 1899.

Date.	Diseases.	Deaths.
Dec. 3	Bright's disease.....	1
Dec. 4	Organic lesion of heart.....	1
Do.....	Senility.....	1
Dec. 7	Cerebral apoplexy.....	1
Dec. 8	Chronic aortitis.....	1
Do.....	Pernicious malarial fever.....	1
Total.....		6

J. R. ARIZA,

Acting Assistant Surgeon, U. S. M. H. S.

Reports from Santiago, Guantanamo, Manzanillo, and Daiquiri.

SANTIAGO DE CUBA, December 6, 1899.

SIR: I have the honor to make the following report of the sanitary condition of the fourth district of the island of Cuba for the week ended December 2, 1899:

Santiago.—In the civil population of this city there was a total of 25 deaths, an increase of 4 over the previous week. The principal causes were as follows: Tuberculosis, 5; typho-malaria, 4; tetanus, 3; typhoid, 1; entero-colitis, 1; pneumonia, 2; other causes, 9; total, 25. Population, 34,000; mortality, 38.23.

There was no yellow fever reported for the week. The city is in good sanitary condition for Santiago, and the continued cold weather will undoubtedly prevent this disease except an occasional sporadic case.

Guantanamo.—Five deaths were reported during this period as follows: Malaria, 2; tuberculosis, 1; gastro enteritis, 1; puerperal fever, 1; total, 5.

Five vessels were inspected on arrival and 2 on departure.

Manzanillo.—During this period 9 deaths have been reported as follows: Malaria, 3; tetanus, 1; gangrene, 2; intestinal disease, 1; other causes, 2; total, 9.

No quarantinable disease has been reported in city.

Daiquiri.—Nothing of interest reported for the past two weeks.

Respectfully,

HERMAN B. PARKER,

Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

DENMARK.

Quarantine against Hull and other places.

COPENHAGEN, November 25, 1899.

SIR: I have the honor to inclose herewith a copy, together with a translation, of a sanitary decree promulgated by the Danish ministry of justice on the 25th instant, extending part of an earlier quarantine order of August 18 last to Hull, owing to the appearance of smallpox at that port.

Respectfully,

LAURITS S. SWENSON.

[Inclosure—Translation.]

Decree by the ministry of justice ordering a quarantine against ships arriving from Hull.

MINISTRY OF JUSTICE, November 19, 1899.

Owing to the appearance of a large number of cases of smallpox at Hull, the ministry of justice hereby decrees that the provisions of section 2, paragraph 1, of the law of July 2, 1880, shall, until further notice, apply to ships that arrive from Hull, or that have communicated with said port, or that have come in contact with ships arriving therefrom.

(a) Quarantine is at present in force against the city of Alexandria and the ports of Portugal.

(b) The provisions of section 2, paragraph 1, of the law of July 2, 1880, at present apply to the following places: The remaining ports of Egypt, the ports on the Red Sea, ports of Tonkin, Cochin China, of the Dutch East India Colonies, and Hull.

(c) The importation of rags and crass wool from the places mentioned under (b), except Hull, is prohibited, except when accompanied by a certificate attesting that they have been carbolized, or washed and heated to 80° Celsius. From these places, except Hull, the importation of used linen, used wearing apparel, and used bedclothes is also prohibited, except when these articles form part of a person's baggage, or in case the consignee (receiver) attests by affidavit that the goods are imported in consequence of the owner's change of domicile, in which case they may be withheld to be disinfected under public supervision when of a filthy or otherwise suspicious character. From the places mentioned under (a) the importation of the following articles is prohibited: Rags, used wadding, crass wool, paper shavings, hair, hides, used bags, carpets, embroideries, fresh offals, hoofs, wool, and raw silk; also used linen, used wearing apparel, and bedclothes, except when these articles form part of a person's baggage, in which case they must be disinfected under public supervision.

This decree takes immediate effect.

HÖRRING.

DOMINION OF CANADA.

Smallpox in Ontario.

TORONTO, December 1, 1899.

SIR: In compliance with the resolutions adopted at the conference of State and provincial boards of health, held at Toronto October 6, 1886, respecting interstate notification of contagious diseases, I beg to make the following statement regarding the prevalence of smallpox in Ontario at the present time:

Municipality.	County.	Date of outbreak.	Houses infected.	Houses at present infected.	Isolated in private houses.	Total cases.	Still sick.
Maidstone.....	Essex.....	Nov. 1	6	6	11	11	11
Belle River.....	do.....	do.....	1	1	2	2	2
Rochester.....	do.....	Nov. 2	16	16	54	54	54
Tilbury, W.....	do.....	Oct. 30	6	6	28	28	28
Tilbury, N.....	do.....	Nov. 5	5	5	23	23	23
Tilbury, E.....	Kent.....	Nov. 28	1	1	2	2	2

Respectfully,

PETER H. BRYCE,
Secretary.

Smallpox in the Province of Quebec.

MONTREAL, December 12, 1899.

The present status of the smallpox outbreak in this province is as follows:

Municipality.	County.	Population.	Date of outbreak.	New cases since last report. (a)	Total cases since outbreak.	Died.	Recovered.	Still sick.	Houses infected since outbreak.	Houses still infected.
St. Philippe de Néri.....	Kamouraska.....	1,049	Aug. 18	0	42	0	2	0	1	0
Mont-Carmel.....	do.....	1,075	Sept. 5	15	172	0	107	65	48	31
St. Paschal.....	do.....	3,109	Oct. 15	0	20	0	17	3	3	2
Ste. Hélène.....	do.....	1,518	Nov. 15	0	3	0	1	2	1	1
St. Germain.....	do.....	600	do.....	0	18	0	10	8	2	2

a Date of last report, December 4.

Respectfully,

ELZÉAR PELLETIER,
Secretary Board of Health of the Province of Quebec.

ENGLAND.

Inspection of emigrants for the United States.

LONDON, ENGLAND, December 2, 1899.

SIR: As reported in letter of the 29th ultimo from Liverpool, I reached this city from there on the same date. The day following being Thanksgiving Day, our Government offices were found closed, and no business was being transacted. The consul-general was absent from the city, having recently started on a vacation to the States, but the deputy consul-general, Mr. Frigout, members of his corps of assistants, and the representatives here of the various steamship lines were able to acquaint me pretty thoroughly with the information desired as to the present status of the emigrant traffic conducted in and through this port.

Formerly a number, if indeed not all, of the British lines (Island lines) used London as a collecting and distributing center for this class of continental travel coming through the Islands, forwarding them from their hotels here to the ports of embarkation at the time of sailing. This custom no longer exists, having been abolished a number of years since with the establishment of hotel accommodations for them at the ports of Liverpool and Southampton. There is, however, a limited amount of booking here of what may be termed "drift" emigrants destined to the United States; that is, a certain number of them arriving not through the agency of the trans-Atlantic lines, but by other routes and are here taken up by the respective companies and forwarded to their destination. As an instance of this, there is a line operating between London and Libau, by which Russian emigrants reach here and take passage for the States.

The "Allan Line" handles the bulk of this class of traffic reaching this point; and from what has been observed it also uses less care in the selection of its third-class passengers than the other lines. This, it is believed, is owing to the fact that the majority of its emigrants are landed at Canadian ports, where presumably the laws regulating immigration are less strict than our own. I refer to this here and at this

time, as it may indirectly become a possible source of danger of the introduction of infection across the Canadian border, although, it is felt the Bureau is fully cognizant of this situation.

Two of the trans-Atlantic lines do not book third-class passengers from this port.

The emigrant traffic through London is also limited, as principally those from the North of the Continent reach the Island through the port of Hull, and are transferred from there direct by rail to Liverpool, while those from the South go more directly to Southampton, with a sprinkling number passing through here, but practically not leaving the cars while in the city.

In the matter of freights, which is incidentally referred to, there is not a large amount of wool from Kurrachee, which is being reshipped here direct by the Atlantic Transportation Company Limited. Hides from the same point are being imported, but it is claimed that they are treated with arsenic and lime before being reshipped, which, if liberally applied, should render them practically safe as regards carriers of infection. Doubtless hides are also handled to some extent in Liverpool, but of this I learned nothing while there. * * *

I have been unable to obtain any definite information in regard to the traffic at Southampton, as only saloon passengers are booked here, with the exceptions as above referred to, and I believe it desirable and necessary to visit that port en route to Marseilles.

I therefore have the honor to report that I depart for Southampton on the 4th instant, the intervening day being Sunday.

Respectfully,

J. A. NYDEGGER,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Concerning inspection of emigrants at Southampton.

PARIS, December 5, 1899.

SIR: I have the honor to confirm cablegram of the 4th instant, reporting my arrival at Southampton, England, on that date, for the purpose of obtaining information in connection with the emigrant traffic carried on in that city, and I herewith beg leave to submit the following report bearing on that subject:

Through the kindness of the United States consul, Mr. Hopley, who keeps an excellent record of the immigration statistics of the port, it was ascertained that there is far less travel of this class of people through Southampton than by way of Liverpool, for, from January 1 to September 31 of the present year, 10,021 emigrants embarked there as against 50,000 odd at Liverpool during the corresponding time.

The nationalities were pretty well represented, however, the largest number of any one nation, 1,570, being Russian Finns and Jews, principally the former; Scandinavians, 1,529, and of Austrians, Germans, and other nationalities, 332. A very small number came from the South.

Of the three trans-Atlantic steamship lines operating at that port, one of these, the American Line, which has one sailing weekly, handles practically all of the emigrants, while a few go by the North German Lloyd Line, and none by the Hamburg-American.

I was unable to witness the handling of emigrants at Southampton, as the last steamer sailed Saturday, the 2d instant, and there would be

no more sailing until the 9th instant, and the situation there did not seem to warrant my delaying until that time.

From the consul's description of the inspection, etc., I judged it to be about the same in method as is observed at Liverpool, but more rigid, perhaps, as to persons, as I understood that a number of rejections were made at the last inspection on account of trachoma. The consul there, as at Liverpool, has to rely mainly on the steamship people for information as regards the condition of emigrants and their baggage, and it would seem that there is more real danger of infection being carried into the States by means of baggage than by persons, although it is claimed that all dirty and suspicious baggage is washed before being allowed on board. Of this I have no reliable information, and there must be some doubt as to this process being carried out in all cases, as it occasionally happens that a lot of emigrants arrive and go directly aboard their steamer without first being admitted to the hotel, as was witnessed in one instance at Liverpool last week.

There is but one boarding house for emigrants in Southampton, and at the time of my visit to it it was dirty and filthy in the extreme.

No shipments of wool or hides from India are being made through Southampton. * * *

Inclosed is a clipping from the Paris edition of the New York Herald of the 2d instant in reference to the nonexistence of plague in Algeria, this country having previously, according to the contained statement, been held as suspicious. It may be of some interest and value to the Bureau.

The reason for submitting this report from Paris is, that it was found that a delay of twenty-four hours at Southampton awaiting the next boat for Havre would have occurred had it been sent from there, and it was contemplated to proceed direct from Havre to Marseilles, but owing to a delay in crossing the channel, I failed to make connections with the through train, and reached here this evening only. I leave to-morrow, the 6th, for Marseilles.

Respectfully,

J. A. NYDEGGER,

Passed Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

GERMANY.

Measures to be adopted at Bremen ports for the purpose of combatting plague.

[From United States Vice-Consul G. W. Murphy.]

[Translation from the Weser Zeitung of November 25, 1899.]

The sanitary officials at Bremen have submitted a report concerning precautionary measures for combatting the danger from bubonic plague. The outbreak of the plague in Portugal and in certain ports of England and Austria, make it necessary to take steps to prevent the introduction of the disease at Bremen ports, and to meet the possibility that plague may be brought in ships to the Weser River. A conference has been held in the imperial sanitary department at Berlin, at which the director of the Bremen Bacteriological Institute was present, and the matter has been very carefully considered by the sanitary officials and a committee consisting of medical authorities, harbor officials, and ship owners. As a result the sanitary officials have made a report and requested appropriations as follows:

1. In addition to the director already empowered to make bacterio-

logical investigations of cases of plague, a number of local bacteriologists must receive further instruction either in the Bacteriological Institute or in the imperial sanitary department at Berlin. To cover traveling expenses, etc., including the cost of sending a physician to Bremerhaven, a sum of 1,600 marks (\$380) is needed.

2. Rooms must be fitted up specially for the purpose in the Bacteriological Institute. Estimated cost, 1,700 marks (\$405).

3. If cases of plague occur at Bremerhaven, a branch laboratorium must be established there under the charge of a physician trained in bacteriology. A room in the quarantine hospital can be fitted up for this purpose at an expense of 350 marks (\$83).

4. For perfecting arrangements for bacteriological plague investigations various articles are needed which will cost 2,480 marks (\$590).

5. Recent investigations prove that rats and other vermin are the principal transmitters of the plague. Owing to the impossibility of preventing rats coming on board vessels at foreign ports and subsequently escaping to the land, the only defense against the danger which threatens us is to exterminate these animals as far as possible. Vessels engaged in traffic between the Weser and ports where the existence of plague is suspected should be supplied with cats. Poison should also be used and such ships should be well smoked after the removal of the cargo. On shore the rats must be fought with cats and rat-catching dogs. Rewards must also be offered for the delivery of dead rats. In order to encourage port watchmen and other harbor employees to keep rat-catching dogs a premium of 30 marks (\$7.50) per annum should be allowed to the owner of each such dog, the total number at Bremen and Bremerhaven not to exceed 25. With this allowance port employees will be willing to keep dogs and pay the dog tax.

In addition to the 750 marks (\$187) needed for this purpose, 2,000 marks (\$470) should be appropriated for paying a premium of 5 pfennigs (1½ cents) for each dead rat delivered. The dead bodies can be disposed of in the ovens of the gas works and in the central heaters of the ports. The possibility that the premiums may encourage the bringing in of dead rats from other places can not be avoided. Another means for getting rid of rats is to sulphurize the sewers in Bremen and to flood with river water those at Bremerhaven. Both of these plans are being considered. Owners of warehouses and barns near the ports are urged in their own interest to do their utmost to destroy the rats nesting therein. Furthermore they are required, as are all port employees, to send to the Bacteriological Institute all rats found dead without visible wounds, in order that they may be examined for traces of plague. Consideration is now being given to the question as to whether and when this requirement should be extended to the public generally, as has already been done at Hamburg. The question as to whether a general destruction of rats by means of poison should be resorted to is also being considered. For various reasons a decision has not yet been reached on either of these points.

6. Cases of plague which may occur at Bremen ports will be strictly isolated. For this purpose a portion of the cholera barracks at Bremen and in Bremerhaven part of the quarantine station will be used. They will be absolutely secured against the entrance and exit of rats, and the admission of unauthorized persons will be forbidden. For making these necessary preparations a sum of 14,080 marks (\$3,450) is necessary.

Respectfully,

G. W. MURPHY,

Vice-Consul at Bremen, Germany.

The SURGEON-GENERAL, U. S. Marine-Hospital Service.

INDIA.

Statement showing the mortality from plague in India for week ended November 11, 1899.

Place.	Deaths.	Place.	Deaths.
THE BOMBAY PRESIDENCY AND SIND.		OUTSIDE BOMBAY PRESIDENCY AND SIND—continued.	
Ahmedabad District.....	7	Madras Presidency—Continued.	
Ahmednagar District.....	68	North Arcot District.....	a 1
Akalkot State.....	31	Salem District.....	3
Baroda State.....	.....	Nellore District.....	.....
Belgaum District.....	420	Trichinopoly District.....	.....
Bhor State.....	25	Coimbatore District.....	.....
Bijapur District.....	180	Mysore State—	
Bombay City.....	74	Bangalore City.....	11
Bronch District.....	.....	Bangalore Civil and Military Sta- tion.....	18
Cutch State.....	2	Bangalore District.....	49
Dharwar District.....	497	Kolar District.....	3
Hyderabad (Sind) District.....	30	Kolar Gold Fields.....	10
Janjira State.....	.....	Mysore City.....	13
Kaira District.....	1	Mysore District.....	8
Kanara District.....	5	Tumkur District.....	5
Kurrachee City.....	1	Chitaldrug District.....	16
Kurrachee District.....	2	Hyderabad State—	
Kathiawar State.....	1	Gulburga District.....	.....
Khandesh District.....	.....	Lingsugur District.....	.....
Kolaba District.....	8	Naldurg District.....	.....
Kolhapur State.....	570	Bidar District.....	.....
Mahi Kantha State.....	.....	Arangabad District.....	.....
Nasik District.....	83	Central Province—	
Palanpur State.....	.....	Wardha District.....	5
Panch Mahals District.....	.....	Nagpur City.....	25
Poona City.....	20	Nagpur District.....	3
Poona District.....	287	Nimar District.....	.....
Ratnagiri District.....	9	Punjab—	
Rewakantha State.....	.....	Jullundur District.....	4
Satara District.....	236	Hoshiarpur District.....	.....
Savantvadi State.....	.....	Rawal Pindi District.....	.....
Savanur State.....	21	Bengal—	
Shikarpur District.....	.....	Calcutta.....	30
Sholapur District.....	102	Howrah District.....	.....
Surat District.....	37	Hooghly District.....	.....
Thana District.....	17	24-Pargannas District.....	.....
Upper Sind Frontier.....	.....	Nadia District.....	.....
OUTSIDE BOMBAY PRESIDENCY AND SIND.		Khulana District.....	.....
Madras Presidency—		Dacca District.....	.....
Anantapur District.....	.....	Darbhanga District.....	.....
Bellary District.....	a 1	Saran District.....	.....
Chingleput District.....	.....	Shahabad District.....	.....
Kurnool District.....	.....	Tipperah District.....	.....
Madras City District.....	.....	Singbhoom District.....	.....
		Balasore District.....	.....

a Imported.

ITALY.

Report from Naples.

NAPLES, ITALY, December 6, 1899.

SIR: I have the honor to report that for the week ended December 6, 1899, bills of health were issued to the following ships:

On December 1, to the steamship *Kaiser Wilhelm II* of the North German Lloyd Steamship Company, bound with passengers and cargo for New York. There were inspected and passed 73 cabin and 489 steerage passengers, and 169 pieces of large and 690 pieces of small baggage.

On December 1, to the steamship *Neustria* of the Fabre Line, bound with passengers and cargo for New York. There were inspected and passed 442 steerage passengers, and 79 pieces of large and 540 pieces of small baggage.

About 50 steerage passengers from Hungary via Trieste were not permitted to embark.

On December 2, to the steamship *Alsatia* of the Anchor Line, bound with passengers and cargo for New York. There were inspected and passed 211 steerage passengers, and 51 pieces of small and 133 pieces of large baggage.

On December 2, to the steamship *Spartan Prince*, of the Prince Line. There were inspected and passed 4 cabin and 628 steerage passengers, and 193 pieces of large and 634 pieces of small baggage.

On December 2, to the British steamship *Heighington*, bound in water ballast for Key West, Fla.

Respectfully,

ENRICO BUONOCORE,

Temporary Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

Modification of quarantine against vessels from Egypt.

WASHINGTON, D. C., *December 8, 1899.*

SIR: I have the honor to inform your excellency that by order No. 15 of maritime sanitation the Italian Government has abrogated articles 2 and 3 of the preceding order No. 14 of November 7 last.

Thus the period of seven days of observation which was enforced on vessels with clean bills of health coming from Egypt to any of the ports of the Kingdom is suppressed and they shall be admitted at once to free pratique under the provisions prescribed by order No. 3.

However, the crew and passengers of such vessels remain subject to the ten days' sanitary observation in the localities of their destination.

Respectfully,

FAVA, *Ambassador.*

HON. SECRETARY OF STATE.

JAPAN.

Report from Yokohama—Plague at Kobe and Osaka.

YOKOHAMA, JAPAN, *November 24, 1899.*

SIR: Under dates of November 15 and 16, I reported 1 case of plague as having occurred at Hiroshima on the 5th, and the outbreak of the same disease at Kobe to the extent of 5 cases. Since last writing, so far as I have been able to learn, no second case has occurred at Hiroshima, and but 3 more undoubted instances of the malady have been met with at Kobe, making 8 in all at the latter place, 1 each on November 7, 9, 11, 12, 13, 15, 16, and 17, all attacked having died.

At Osaka, a very large manufacturing city some 30 miles from Kobe, on the 20th, 2 little girls were seized with plague after a visit of 1 of them to a cotton mill where old cotton, suspected to be of the lot from Niuchwang referred to in my letter of the 15th, was being worked up. Both of these girls, sisters, are dead. This makes 10 cases in all to the present date.

Many suspected cases have been reported from Kobe and its neighborhood which, under observation, have been found to be of other disease.

The Government has taken very active measures, briefly as follows:

(1) Professor Kitasato, with several expert assistants, was sent to Kobe at the news of the first case. He, intrusted with full powers, has

called to him from various parts of the country a large number of physicians more or less trained by himself, and 40 or 50 of these have already arrived in the epidemic district.

(2) A thorough examination of all persons well or ill who can possibly be supposed to have been exposed to infection is being made in Kobe and its neighborhood, as well as at Osaka.

(3) A careful examination is made of all passengers leaving Kobe or Osaka, either by steamer or railway, before embarkation, and, at Kobe, a locally prominent English medical man is employed for this work in association with the Japanese doctors.

(4) Thorough examination of passengers by rail is also made at several points on each of the different railways connecting with both Kobe and Osaka, north and south of these cities.

(5) A general cleaning and disinfecting of all cities and towns, not only inside of but beyond the present area of the epidemic, is being carried out under the superintendence of the police, and an energetic campaign against the pathogenic rat has been inaugurated in compliance with the published advice of Professor Kitasato and other experts.

(6) The laws of marine quarantine are being applied with almost excessive stringency, or what would seem excessive were the personnel of the quarantine force of higher and more experienced character.

At present it looks as though the efforts for the suppression of the epidemic may be successful, though it must not be forgotten that cold weather is just beginning and is, probably, most unfavorable to the development of the disease. It is to be hoped that the measures taken may be so thorough as not only to stamp out the present outbreak, but to afford security against its renewal next spring.

In connection with the apparent origin of the disease from old cotton imported from a plague center, I would add that all materials of this class are now destroyed wherever found, if of Chinese origin, in connection with the cleansing operations now being carried out.

In 1894, when upon myself, as a member of the imperial board of health, happened to fall the chief responsibility for preparing special rules and regulations to avoid the importation of plague from Hong-kong, where it had just broken out, I stringently prohibited the admission of rags, old cotton, or old clothing, among other things, and put the period of quarantine for plague at nine days. Later, after the study of the disease made by Professors Kitasato and Awoyama, the regulations were changed and these prohibitions ceased to be effective, with what disastrous results is now shown; while the period of detention was reduced to seven days, in my opinion, another great mistake.

In accordance with your cable dispatch of the 16th instant, I immediately appointed as Acting Sanitary Inspector, U. S. M. H. S., at Kobe, Dr. J. Bucknill Fowler, the only available man, and, fortunately, a very good one. He has accepted the appointment; I have instructed him to the best of my ability, and he has entered upon his duties.

As I understand this appointment to be one of emergency only, and so, it is to be hoped, temporary, I shall be glad to have instructions as to the conditions which should govern the period of Dr. Fowler's service.

Respectfully,

STUART ELDRIDGE, M. D.,

Acting Assistant Surgeon, U. S. M. H. S.

Sanitary Inspector, Yokohama.

The SURGEON-GENERAL,
U. S. Marine-Hospital Service.

MEXICO.

Report from Vera Cruz.

VERA CRUZ, MEXICO, December 7, 1899.

SIR: I have the honor to make the following report for the week ended December 7: Cases of yellow fever, 2; deaths, none; cases of smallpox, 4; 1 death; deaths from tuberculosis, 12; from all causes, 28. There was only 1 death reported from fever, and that from pernicious. The smallpox cases seem to be under control, vaccination, isolation, and disinfection being enforced by the local health authorities.

Respectfully,

SAML. H. HODGSON,

Acting Assistant Surgeon, U. S. M. H. S.

The SURGEON-GENERAL,

U. S. Marine-Hospital Service.

SPAIN.

Necessity for examiner of emigrants at Santander and Corunna.

BARCELONA, SPAIN, November 25, 1899.

SIR: I have the honor to confirm my cablegram of yesterday as follows:

SECRETARY OF STATE, Washington: Surgeons more necessary at Santander and Corunna where emigration from both places four hundred each week. Here small and little danger from Portugal. Consul at Corunna has employed local doctor. LAY.

This cablegram was sent the Department in order that the Marine-Hospital Service might know of the large emigration from the northern and western coasts of Spain to Cuba and Porto Rico at the present time, and if thought necessary, either Assistant Surgeon Anderson who has been detailed for duty here could be transferred to Corunna or Santander or other surgeons sent to one or both of these places at once.

As will be seen by the reports from the former consular agent at Santander to the Surgeon-General of the Marine-Hospital Service, the emigration from that place by steamers leaving once or twice a week is very large. The British vice-consul at Gijon informs me in a letter dated November 22 that, "emigration from Asturias continues on a large scale; some four hundred sailed from Gijon a few days since via Santander." The consul at Corunna reports that steamers left that port and Vigo for Cuba and Porto Rico on the 23d and 24th instants each carrying 400 passengers, and that he has employed a local doctor to assist him in executing the quarantine regulations.

One surgeon stationed at Corunna might be sufficient for the inspection of passengers, steamers, etc., from the places on the northern coast and for those from Vigo and Corunna, as all steamers from Santander stop at Corunna before finally departing for Cuba.

There is less danger from emigrants coming from Portugal here than at Cadiz, Corunna, Vigo, and Santander, as passengers from that country would be more likely to embark for Cuba at these places, still there is always more or less at Barcelona, as passenger steamers come here from all Mediterranean ports.

During the month five steamers carrying 252 cabin and 256 steerage passengers have left Barcelona for Cuba, Porto Rico, and the Philippines.

With reference to the Department's cablegram of the 2d instant, to instruct the consul at Corunna to prohibit steerage passengers from

Oporto and other infected territory shipping for the United States, Cuba, and Porto Rico, I beg to state that it would be difficult to be certain where a person comes from in Spain for quarantine purposes. I have suggested to the consul at Corunna to request steamship companies to inspect the "cedulas" of passengers applying for steerage tickets, but this precaution offers little security, as an emigrant can borrow a "cedula."

Respectfully,
Hon. ASSISTANT SECRETARY OF STATE.

JULIUS G. LAY,
Consul-General.

FOREIGN STATISTICAL REPORTS.

AUSTRALIA—*Queensland—Brisbane*.—Month of August, 1899. Estimated population, 107,840. Total number of deaths, 97, including diphtheria, 1; whooping cough, 1, and 12 from phthisis pulmonalis.

BRAZIL—*Santos*.—Period from October 18 to November 18, 1899. Estimated population, 40,000. Total number of deaths not reported. Eleven deaths from bubonic plague.

BRITISH COLUMBIA—*Vancouver*.—Month of November, 1899. Estimated population, 30,000. Total number of deaths, 36, including 1 from enteric fever.

CHILE—*Antofagasta*.—Month of October, 1899. Estimated population, 15,000. Total number of deaths, 54, including 5 from phthisis pulmonalis.

DUTCH GUIANA—*Paramaribo*.—Month of October, 1899. Estimated population, 30,567. Total number of deaths, 70. No contagious diseases reported.

FRANCE—*Nice*.—Month of October, 1899. Estimated population, 108,227. Total number of deaths, 155, including enteric fever 5, whooping cough, 1, and 20 from phthisis pulmonalis.

St. Etienne.—Two weeks ended November 15, 1899. Estimated population, 135,784. Total number of deaths, 114, including diphtheria, 2; enteric fever, 8, and 16 from phthisis pulmonalis.

JAPAN—*Nagasaki*.—Ten days ended November 10, 1899. Estimated population, 131,000. Number of deaths not reported. One death from enteric fever.

RUSSIA—*Riga*.—Month of September, 1899. Estimated population, 282,000. Total number of deaths, 555, including diphtheria, 9; enteric fever, 11; measles, 26; scarlet fever, 10; whooping cough, 2; smallpox, 11, and 43 from phthisis pulmonalis.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
													Whooping cough.
Acapulco.....	Dec. 2	6,000	3										
Amherstburg.....	Dec. 9	2,800	0										
Amsterdam.....	Dec. 2	521,620	130						1	1			3
Antwerp.....	Nov. 25	287,462	91					3	2	2	1	2	1
Athens.....	do.	200,000						1					
Do.....	Dec. 2	200,000						1					
Barranquilla.....	Nov. 25	40,000	22	1									
Belfast.....	do.	350,000	187						4			3	2
Belize.....	Nov. 7	13,000	6										
Belleville.....	Nov. 11	10,442	4										
Bergen.....	Nov. 29	68,000	15										
Berlin.....	Nov. 11	1,834,824	550						1	16	14	2	
Do.....	Nov. 18	1,834,824	542						5	9	17	3	
Bluefields.....	Dec. 2	3,018	0										
Bombay.....	Nov. 14	821,764	852	110	88	1		9	1			13	
Bradford.....	Nov. 25	231,260	74							2		3	
Brussels.....	do.	551,611	146						1	1	1	3	
Calcutta.....	Oct. 28	681,560	848		60	8							
Do.....	Nov. 4	681,560	465		38	8						1	
Callao.....	Nov. 5	25,000	19										1
Catania.....	Nov. 30	124,000	64						2			1	
Christiania.....	Dec. 2	225,000	58									3	
Colon.....	Dec. 6	8,000	6										
Copenhagen.....	Nov. 25	351,000	113	15							1	1	4
Curacao.....	do.	29,918	14										
Do.....	Dec. 2	29,918	16										
Dublin.....	Nov. 25	319,594	220						4	1	2	38	
Dundee.....	Dec. 2	166,072	63						1				2
Edinburgh.....	do.	298,927	108										
Flushing.....	do.	18,371	4										
Funchal.....	Nov. 26	36,982	12									1	
Do.....	Dec. 3	36,982	15										
Geneva.....	Nov. 18	95,348	26									1	
Ghent.....	Dec. 2	162,652	57						1				
Girgenti.....	Nov. 25	24,428	9										
Gothenburg.....	do.	122,205	39						1			1	5
Guatemala.....	Nov. 24	65,000	34						1				
Guayaquil.....	Nov. 11	50,000	29										
Do.....	Nov. 18	50,000	39										
Halifax.....	Dec. 9	45,000	13						1				
Hamburg.....	Dec. 2	675,351	164									5	1
Hamilton, Bermuda.....	Dec. 5	16,000	5										
Hongkong.....	Nov. 4	248,710	116	15	1			1	1				
Kurrachee.....	Nov. 11	98,195	2										
Kingston, Canada.....	Dec. 8	18,300	9										
Do.....	Dec. 15	18,300	2										
La Rochelle.....	Nov. 19	30,000	13										
Do.....	Nov. 26	30,000	13										
Leeds.....	Dec. 2	423,889	117						3			6	1
Leghorn.....	Dec. 3	104,948	46						1			1	2
Leipsic.....	Nov. 25	430,635	171						1	4	1		
Leith.....	Dec. 2	77,385	26								1		
Licata.....	Nov. 25	20,000	15						2				
Liverpool.....	Dec. 2	668,645	293						7	4	7	5	11
Lyons.....	Nov. 25	466,023	174						3			1	
Madras.....	Nov. 10	452,518	401					1					5
Mannheim.....	do.	159,986	33								1		1
Marseilles.....	Dec. 4	447,344	391					9	33		5	1	
Mayence.....	Dec. 2	80,000	32										
Messina.....	do.	107,000	32						5				
Monterey.....	Dec. 7	25,000	37										
Montevideo.....	Oct. 28	215,061	51						1				1
Do.....	Nov. 4	215,061	80										
Nice.....	Nov. 30	114,000	36						2				
Nottingham.....	Dec. 2	250,000	74						7	1		2	
Nuevo Laredo.....	Nov. 25	6,000	1	1									
Do.....	Dec. 2	6,000	4	1									
Do.....	Dec. 9	6,000	6	1									
Odessa.....	Nov. 4	414,800	138						2	1	2		
Osaka and Higo.....	Nov. 18	214,119	115						1				5
Palermo.....	Nov. 25	300,000	116								2		
Panama.....	Dec. 5	16,000	5				5						
Paris.....	Dec. 2	2,511,935	913						12	4	5	2	4

MORTALITY TABLE, FOREIGN CITIES—Continued.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles. Whooping cough.
Pernambuco.....	Oct. 7	200,000	119	23									
Do.....	Oct. 14	200,000	115	22									
Do.....	Oct. 21	200,000	118	18									
Do.....	Oct. 28	200,000	121	21									
Plymouth.....	Dec. 2	99,848	47	1									
Port au Prince.....	Nov. 27	60,000	19										
Do.....	Dec. 4	60,000	13										
Port Limon.....	Dec. 2	3,500	4										
Prague.....	Nov. 25	190,260	104						1	1	2		
Progreso.....	Nov. 8	4,800	3										
Do.....	Nov. 15	4,800	4										
Do.....	Nov. 22	4,800	6										
Do.....	Nov. 30	4,800	4										
Puerto Cortes.....	Dec. 6	2,000	0										
Quebec.....	Dec. 9	73,000										1	
Rheims.....	Dec. 2	107,709	33						1				1
Rome.....	Sept. 9	508,779	36						11				
Do.....	Sept. 16	508,779	37						8				
Do.....	Sept. 23	508,779	38						3				
Do.....	Sept. 30	508,779	39						9				
Do.....	Oct. 7	508,779	40						6				
Do.....	Oct. 14	508,779	41						6				
Do.....	Oct. 21	508,778	42						5				
Do.....	Oct. 28	508,779	43						4				
Do.....	Nov. 4	508,779	44						12				
Do.....	Nov. 11	508,779	45						7				
Rotterdam.....	Dec. 2	318,690	98						4			1	
St. Georges, Bermuda.....	do.....	2,150	1										
St. John, New Brunswick.	Dec. 9	45,000	11	1									
St. Stephen, New Brunswick.	do.....	3,000	0										
Santa Cruz, Teneriffe.....	Nov. 25	33,425	12										
Sheffield.....	do.....	363,280	158						4	3	12	8	
Do.....	Dec. 2	363,280	151						6	3	17	9	1
Singapore.....	Oct. 14	97,100	153	18		2	14						
Do.....	Oct. 21	97,100	148	8		6	24						
Smyrna.....	Nov. 26	300,000	60	9					2				
Stettin.....	Nov. 25	153,000	70						2		2		
Trapani.....	do.....	45,095	21										
Tuxpam.....	Dec. 4	16,000	9	2									
Uttala.....	Dec. 2	800	0										
Valencia.....	do.....	203,958							1				
Venice.....	Nov. 25	171,779	88						3			8	
Vera Cruz.....	Dec. 7	25,000	23	12			1						
Vienna.....	Nov. 25	1,639,811	542						3	7	8	11	1
Warsaw.....	do.....	601,408	218				4	2		9	3	4	2
Yokohama.....	Nov. 4	189,455							3		3		
Do.....	Nov. 18	189,455									i		

By authority of the Secretary of the Treasury :

WALTER WYMAN,
Surgeon-General U. S. Marine-Hospital Service.

